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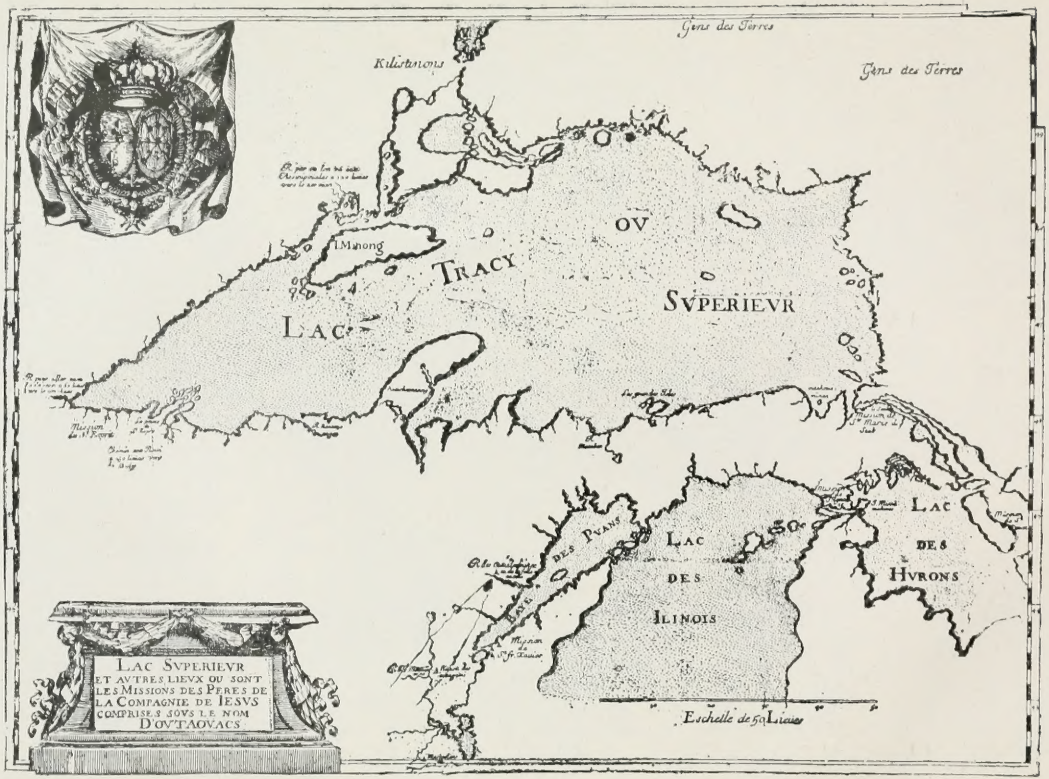

JESUIT MAP OF LAKE SUPERIOR—1670-71.

18646

MINNESOTA
IN
THREE CENTURIES
1655 — 1908

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Volume One

Description and Explorations

By WARREN UPHAM, A. M., D. Sc.,

Assistant from 1874 to 1895 on the Geological Surveys of New Hampshire, Minnesota, and the United States; since November 1, 1895, Secretary and Librarian of the Minnesota Historical Society.

Semi-Centennial Edition

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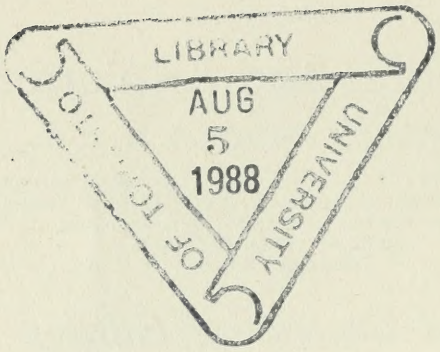
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MINNESOTA, 1655—1908

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PREFACE

At the beginning of this History of Minnesota, a description of the State is presented in four chapters, treating of its geographic and geologic features, its climate, and the flora and fauna. Another chapter treats of the Indians who occupied this region before the first coming of white men, and who afterward continued as its principal inhabitants during nearly two hundred years, until the period of white agricultural settlements.

The explorations of the area of Minnesota, which are the main theme of this first volume, were begun in 1655 and 1660 by the two western expeditions of Groseilliers and Radisson. Through more than a century the French pioneers of the fur trade and of missions were the makers and writers of our history. After the cession of New France in 1763 to Great Britain and Spain, the history was continued by English-speaking explorers and fur traders, United States government expeditions, and the national and state geological surveys.

Throughout this work the extensive Library of the Minnesota Historical Society has been constantly used by the present writer, as also by the other authors and editors of the three ensuing volumes, which narrate the history and development of Minnesota from the time of the building of Fort Snelling.

WARREN UPHAM.

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Chapter I.

GEOGRAPHIC FEATURES.

AREA.

MINNESOTA comprises 84,286.53 square miles, or 53,943,379 acres, as measured on the plats of the United States land surveys, in the office of the state auditor. About one fifteenth of this area is occupied by the abundant lakes and rivers, covering 5,637.53 square miles, or 3,608,012 acres; but no part of Lake Superior, adjoining the state on the northeast, is included. The measurement was done by H. H. Young, secretary of the State Board of Immigration, and was published by Prof. N. H. Winchell in the first volume of the final reports of the Minnesota Geological Survey, giving also the areas of land and water in all the eighty counties as they were in 1884.

Prof. C. W. Hall, in his admirable text-book, *Geography of Minnesota,* published in 1903, remarks that the land area of this state, 50,335,367 acres, would make 314,596 farms containing 160 acres each.

The length of the state from north to south is 380 miles, excepting the small tract west of the Lake of the Woods and north of the 49th parallel. Its greatest width, near its northern boundary, measured from Pigeon Point on Lake Superior west to the Red river, is 346 miles; and its least width, from the mouth of the St. Croix river west to the boundary between Minnesota and South Dakota, is 178 miles.

ALTITUDE.

The average altitude of Minnesota above the level of the sea is stated by Hall as about 1,200 feet, half of the area being above and half below that height.

If we consider the form of the entire continent of North America, it is seen to include on the east and west two mountainous regions, or belts, and between them a comparatively flat and low expanse. Near the middle of the vast interior expanse lies the state of Minnesota. The eastern mountainous tract stretches from Labrador southwestward to Alabama, culminating in the Laurentide highlands and mountains north of the River St. Lawrence, the White mountains and the Adirondacks, the Green mountains and the Catskills, and the parallel Appalachian ranges farther southwest. The summits of this mountain belt vary in elevation from a half mile to one mile, and slightly more, above the sea. On the west a longer and wider region of mountains, including generally three or four lofty parallel ranges, extends from the northern and southern coasts of Alaska southeasterly through the Canadian Northwest Territory, British Columbia, the western third of the United States, Mexico, and Central America, to the Isthmus of Panama; and beyond this it continues south in the great Andes range along the entire western coast of South America to Cape Horn. In the United States this Cordilleran mountain belt includes the Rocky mountains and the Sierra Nevada and Coast ranges, and its highest summits are nearly three miles above the sea level.

Minnesota, situated on the central low expanse between these mountainous regions, and at the geographical center of the continent, has an average or mean altitude, as before noted, of about 120 feet less than a quarter of a mile. Its lowest land is the shore of Lake Superior, 602 feet above the mean tide sea level, with yearly fluctuations of one or two feet above and below that mean level of the lake. Its highest elevations are found along the Mesabi range and the Giant's range, culminating at the tops of the Misquah hills, in the vicinity of Winchell lake, near the

center of Cook county and forty-five to fifty miles west of Pigeon Point, which rise about 1,630 feet above Lake Superior, or 2,230 feet above the sea.

GENERAL CONTOUR.

The topographic features of Minnesota may be briefly summed up for its western three-quarters as being a moderately undulating, sometimes nearly flat, but occasionally hilly area, gradually descending from the Coteau des Prairies and from the Leaf hills, respectively about 2,000 and 1,700 feet above the sea, to half that height, or from 1,000 to 800 feet, in the long, flat basin of the Red river valley, and to the same height along the valley of the Mississippi from St. Cloud to Minneapolis.

Exceptions to the prevailingly undulating or rolling and rarely hilly contour are the southeast part of the state, where the Mississippi river and its tributaries are inclosed by bluffs from 200 to 600 feet high, and the northwest coast of Lake Superior and the part of the state lying north of this lake and east of Vermilion lake. A very bold rocky highland rises 400 to 800 feet above Lake Superior within one to five miles back from its shore along all the distance of 150 miles from Duluth to Pigeon Point, the most eastern extremity of Minnesota; while farther north are many hill ranges, seldom worthy to be called mountains, 200 to 800 feet higher, mostly trending from northeast to southwest, or from east to west.

The best way to display on a map the altitude and general configuration of any land surface, whether flat, undulating, or mountainous, is by contour lines, drawn at equal vertical intervals, as 20 feet, 50 feet, or 100 feet. On the map sheets of the United States, now being prepared under the direction of the national geological survey, lines of contour are mostly drawn to show each successive 20 feet of ascent or descent. Where the slope is steep, as on bluffs of river valleys and on mountain sides, the lines are brought very near together or are almost merged, even on the large scale maps of one or two miles to the inch which are drafted from these surveys. But on a nearly level or

moderately inclined area the contour lines are widely separated. For the maps published in the final reports of the Minnesota Geological Survey, mostly varying in scale from five to ten miles to an inch, these contour lines are drawn for each 50 feet of height or vertical change of level. They may be best understood as the successive shore lines which water, as of the ocean, would take if it were gradually to rise and cover the areas from one 50-feet level to another until all the state were submerged.

As illustrations of the significance of contour lines, showing how they afford means of learning the altitude of all parts of the state above the sea, and the difference in height of any two localities, let us briefly note the course of the lines in Minnesota at the heights of 1,000 and 1,500 feet.

The 1,000 feet line enters the southeastern part of the state along the bluffs of the Mississippi valley; it follows up the valleys of the Root and Zumbro rivers to Preston and Rochester; along the southern part of the Minnesota river basin it runs to Big Stone lake, which is 962 feet above the sea; and thence it passes into South Dakota. Another contour line of 1,000 feet enters the state close to the northwest side of the St. Croix river, in Pine County, and passes in a very meandering course westerly to Sauk Rapids and St. Cloud; thence it runs in an irregular southerly direction across 90 miles of latitude to the north side of Swan lake, in Nicollet county; next it runs northwesterly, only a few miles northeast of the Minnesota river and parallel with it, to the eastern bluffs of Big Stone and Traverse lakes; and thence it extends nearly due north along the east side of the Red river valley for more than 200 miles to the international boundary, passing into Manitoba. These lines divide the portions of Minnesota below 1,000 feet from the portions higher, except that another 1,000 feet contour line skirts the high coast of Lake Superior.

Going up 500 feet above these lines to those at 1,500 feet above the sea, we find large areas inclosed by the latter in northeastern Minnesota, from the Pigeon river west to the sources of Swan and Prairie rivers, tributary to the upper Mississippi. Another tract above 1,500 feet embraces a good share of Hub-

bard and Becker counties and of the southwestern part of Beltrami county, including the highest sources of the Mississippi, Crow Wing, Otter Tail, and Wild Rice rivers. The Leaf hills are a smaller tract above this level in the southern part of Otter Tail county. But again in southwestern Minnesota a large district above the 1,500 feet contour line comprises Pipestone county and the greater parts of Lincoln, Murray, Nobles, and Rock counties, along the belt named by the French voyageurs and explorers the Coteau des Prairies, meaning, in English, the Highland of the Prairies.

LAKES AND STREAMS.

The upper Mississippi river drains an area of about 47,000 square miles in Minnesota, or more than half of this state.

In its southwest corner about 1,500 square miles send their drainage by the Big Sioux and Little Sioux rivers to the Missouri, being thus tributary to the lower Mississippi.

In the northeastern part of Minnesota the St. Louis river and smaller streams flowing into Lake Superior, and so tributary to the St. Lawrence river, drain an area of about 7,700 square miles.

Last, in northern and northwestern Minnesota, the basin of the Rainy river comprises about 9,700 square miles, and that of the Red river about 18,300 square miles, making together 28,000 square miles in this state tributary to Lake Winnipeg and through the Nelson river to Hudson bay.

The great Lake Superior, and Rainy lake and the Lake of the Woods on our northern boundary, belong partly to Minnesota. Included entirely within our area, Red lake, the largest lying in any single state of the Union, has an extent of about 440 square miles, or somewhat more than several of our smaller counties. Next in size, among the myriad lakes in this state, are Mille Lacs, having an area of almost exactly 200 square miles, and Leech lake and Lake Winnebagoshish, each almost as large.

It is estimated that, in total, Minnesota contains 10,000 lakes and lakelets. Most of them lie in hollows of the glacial

and modified drift; and they are absent, or very infrequent, outside the drift moraines, in the southeast and southwest corners of the state. In its northeast part, north of Lake Superior, where the drift on some extensive areas was deposited only in scanty amount, many of the lakes occupy rock basins.

Lake Itasca, the head of the Mississippi, is about 1,460 feet above the sea. This river, in its ordinary stage of water, at Brainerd, is 1,150 feet above the sea level; at St. Cloud, 975 feet; at Minneapolis, above St. Anthony's falls, 800 feet; a mile below the falls, 720 feet; at Fort Snelling, 690 feet; at St. Paul, 685 feet; in Lake Pepin, 664 feet; at Winona, 640 feet; and at the southeast corner of this state, 620 feet.

Minnesota, like all the other states adjoining the Mississippi, excepting Louisiana, receives its name from a large river. As in Wisconsin and Illinois, the Minnesota is the largest river lying wholly or mostly in the state named for it. Only its head streams and sources above Big Stone lake are outside of Minnesota, being in the northeast corner of South Dakota. This Sioux name Minnesota means whitish water, or, as may be said poetically, "sky-tinted water," in allusion to the whitishly turbid color of the river in stages of flood. It has a length of about 300 miles, and its basin measures a little over 16,000 square miles. From Big Stone lake, through which this river flows on the west line of Minnesota, it has a descent of 272 feet to its mouth at Fort Snelling, where its junction with the Mississippi at the ordinary stage of low water is 690 feet above the sea.

All the creeks and rivers of this state, meandering through its northern woods, and traversing its great southern and western prairie region, were routes of travel for the aboriginal red men, and for the early white explorers and fur traders. Their graceful birch canoes passed along these almost countless streams, and across the thousands of beautiful lakes, as the chief means of travel and commerce, during nearly two hundred years from the time of the first coming of white men.

Where the streams are broken by rapids or falls, the canoe and its freight were portaged past the obstruction; and the headwaters or branches of each river system were connected with

those of others by portage paths. Throughout the gently undulating region, adjacent drainage areas are in many places separated by scarcely perceptible heights of watershed.

On the most western of the aboriginal routes of canoe traffic in Minnesota, at Brown's Valley, a great channel cut during the closing part of the Ice Age, between Lake Traverse, outflowing north to the Red river, and Big Stone lake, flowing southward by the Minnesota river, the canoes could sometimes be floated in rainy seasons across a watershed separating the greatest drainage basins of the continent.

Further notes of heights of lakes and descent of streams in this state are supplied from a report made by the present writer, entitled *Altitudes between Lake Superior and the Rocky Mountains* (United States Geological Survey, Bulletin No. 72, 229 pages, 1891). These heights, given in feet above the sea, were obtained from railway surveys and other exact surveys by leveling.

The St. Louis river, in its stage of low water, has a height of about 1,260 feet at the mouth of the East Savanna river, and 997 feet at the Northern Pacific railway bridge between Carlton and Thomson, thence descending 395 feet to Lake Superior.

Rainy lake is 1,117 feet above the sea; the Rainy river descends 23 feet at International Falls, two miles and a half from the mouth of this lake; the Lake of the Woods is at 1,060 feet; and the Winnipeg river thence falls 350 feet to Lake Winnipeg.

Lakes in northern and central Becker county, forming the sources of Otter Tail river, the head stream of the Red river, are 1,400 to 1,500 feet above the sea; Otter Tail lake, 1,315 feet; Lake Clitherall, 1,334; and the East and West Battle lakes, 1,328. The Red river at Fergus Falls descends about 80 feet in three miles, from 1,210 to 1,130 feet; at Breckenridge its height at the stage of low water is 943 feet; at Moorhead and Fargo, 866 feet; at Grand Forks, 784; at St. Vincent and Pembina, 748; and at the city of Winnipeg, 724.

The range between the lowest and highest stages of the Red

river much surpasses that of any other river in Minnesota. At Breckenridge the range is about 15 feet, but it increases rapidly northward, becoming 32 feet at Moorhead, attaining its maximum of 50 feet in the south part of Polk county, and continuing nearly at 40 feet from Grand Forks to the international boundary and Winnipeg. Floods rising nearly or quite to the high-water line thus noted have been rare, occurring in 1826, 1852, 1860, 1861, and 1882. They are caused in the spring by the melting of unusual supplies of snow and by heavy rains, and often are increased by gorges of ice, which is usually broken up along the southern upper portion of the river earlier than along its lower course. These floods attain a height only a few feet below the level of the adjoining prairie where that is highest, and along the greater part of the distance between Moorhead and Winnipeg the banks are overflowed and the flat land on each side of the river to a distance of two to four or five miles from it is covered with water one to five feet or more in depth.

Chapter II.

GEOLOGIC HISTORY

THE following concise sketch of the history of this state during the vast geologic ages is based on the publications of the Minnesota Geological Survey, from 1872 to 1901, comprising twenty-four annual reports and six quarto volumes of final reports. This survey, occupying thirty years, was under the continuous direction of Prof. N. H. Winchell as state geologist, with whom the present writer was for a large part of that time an assistant.

THE ARCHEAN ERA.

Granite, syenite, greenstone, gneiss, and schists, belonging to the Archean or Beginning era, reach on the northern boundary of Minnesota from Gunflint and Saganaga lakes west to the Lake of the Woods. They thence extend south upon a large part of St. Louis and Itasca counties to the Vermilion and Mesabi ranges, famed for their immense deposits of iron ore.

A narrow Archean belt continues from this great area southwesterly through Cass county, mostly covered by the glacial drift, and expands into a second large area of these rocks, reaching from Todd, Morrison and Stearns counties northeast to Carlton county and south to New Ulm. The extensive granite quarries near St. Cloud and Sauk Rapids are in this area.

The same rocks also underlie a large district west of New Ulm, extending to the western boundary of this state, mainly

covered by Cretaceous beds and glacial drift. In that part of the Minnesota river valley, channeled about 150 feet below the general level of the country, the Archean granites and gneisses are seen in many and extensive outcrops, and have been much quarried at Ortonville, near the mouth of Big Stone lake.

Archean time, during which these oldest rocks of Minnesota were formed, was exceedingly long, perhaps equalling all the later eras. Its early part may be termed azoic, from the absence of any evidences that the earth or the sea then had either plant or animal life.

PALEOZOIC TIME.

Next after the Archean was a very long era characterized by ancient types of life, as its name Paleozoic signifies.

In the northeast part of Minnesota, adjoining Lake Superior, early Paleozoic rocks, comprising gabbro, slates, quartzites, and conglomerates, occupy nearly all of Cook and Lake counties, the southeast part of St. Louis county, and eastern Carlton county. Westward these rocks are thought to underlie the glacial and modified drift on a wide belt reaching to the lower part of Crow Wing river. They are called the Taconic series by Professor Winchell, who regards them as equivalent with the Lower Cambrian strata, and probably also partly the Middle Cambrian, of other states and countries.

In southwestern Minnesota a great quartzite formation of the Taconic period has limited outcrops in Brown, Watonwan, Cottonwood, Pipestone, and Rock counties, where it doubtless occupies large areas beneath the drift.

Advancing upward in the succession of rock strata, and onward in the Paleozoic era, we have in the southeast part of this state, from Pine county south to the Iowa line, and reaching east into Wisconsin, a great series of Upper Cambrian sandstones, limestones, and shales. Unlike the preceding Taconic strata, which are mostly much tilted or folded, the Upper Cambrian and higher formations in this state are nearly horizontal strata, having been only very slightly disturbed or changed from their original condition as marine sediments.

Another and similar series, of Lower Silurian age, chiefly limestones and shales, lies next higher in the vicinity of St. Paul and Minneapolis, and has a large development thence southward, flanked on each side by the Cambrian formations.

Latest of the Paleozoic strata in Minnesota are scanty Devonian limestones, shales, and sandstones, observed in Mower county and continuing into Iowa.

In the Upper Cambrian series, sandstone is extensively quarried at Hinckley and Sandstone, in Pine county, and limestone at Kasota and Mankato, in the Minnesota valley. Quarries of smaller extent are also worked at many other places in both the Upper Cambrian and Lower Silurian series.

This state has no Carboniferous nor Permian strata, belonging to the closing periods of Paleozoic time. If any sediments were then laid down here, they have since been eroded and removed during long ensuing ages, when the state was a land surface. Probably it stood above the sea, receiving no marine nor estuarine deposits, but undergoing slow erosion by rains, rills, and rivers, bearing sediments away, during the Carboniferous period and onward until the Cretaceous period.

MESOZOIC TIME.

Through the early and greater part of the Mesozoic era, so named for its intermediate types of plants and animals, Minnesota appears to have been a land area, receiving therefore no additions to its rock formations. The floras and faunas of this time were gradually changing from their primitive and ancient characters, called Paleozoic, but had not yet attained to the relatively modern or new forms which give the name Cenozoic to the next era.

Toward the end of the Cretaceous period, in late Mesozoic time, this area was again mostly depressed beneath the sea. Frequent outcrops of Cretaceous shales and sandstone, continuous from their great expanse on the western plains, occur in some parts of central and southern Minnesota; and in numerous other places deep wells, after passing through the thick covering of

glacial drift, encounter these Cretaceous strata, which sometimes are found to reach to a thickness of several hundred feet. Further evidence of the eastward extension of the Cretaceous sea upon this state is afforded in its northern part by Horace V. Winchell's discoveries of Cretaceous shales in place on the Little Fork of the Rainy river and on the high Mesabi iron range.

During the following Cenozoic era, when this was a land region subjected to erosion, its Cretaceous deposits were largely carried away; but a remaining portion, in some tracts having considerable depth, probably still lies beneath the drift on the greater part of the western four-fifths of Minnesota. Concerning its eastern limit, Prof. N. H. Winchell writes: "A line drawn from the west end of Hunter's Island, on the Canadian boundary line, southward to Minneapolis, and thence southeastwardly through Rochester to the Iowa state line, would, in general, separate that part of the state in which the Cretaceous is not known to exist from that in which it does. It is not here intended to convey the idea that the whole state west of this line is spread over with the Cretaceous, because there are many places where the drift lies directly on the Silurian or earlier rocks; but throughout this part of the state the Cretaceous exists at least in patches, and perhaps once existed continuously."

CENOZOIC TIME.

Ever since the uplift of Minnesota from the Cretaceous sea, it has stood above the sea level and has received no marine sediments. It was instead being slowly sculptured by rains and streams through the long periods of the Tertiary era; and during a part of the relatively short Quaternary era it was deeply covered by snow and ice similar to the ice-sheets that now envelope the interior of Greenland and the Antarctic continent.

These two eras, or principal divisions of geologic history, may be here classed together as a single Cenozoic era, distinguished by the evolutionary creation of new and present types of life. Nearly all the plants and animals of the preceding eras have disappeared, as also many that lived in the early Cenozoic

periods, while new species succeeding them make up the present floras and faunas.

The creation of man, his dispersion over the earth, and his development in the white, black, yellow, and red races, took place during the later part of Cenozoic time, which is often called the Pleistocene (meaning the newest) period or the Quaternary era. Finally the dominance of mankind in the history of the earth, with utilization of its vast natural resources, forms another grand time division which has been called the Psychozoic era, distinguished by the higher life and dominion of the mind or soul. Thus the Tertiary, Quaternary, and Psychozoic divisions of time are successive parts of the Cenozoic era, continuing to the present day.

THE ICE AGE.

The last among the completed periods of geology was the Ice Age, most marvelous in its strange contrast with the present time, and also unlike any other period during the almost inconceivably long, uniformly warm or temperate eras which had preceded. The northern half of North America and northern Europe then became enveloped with thick sheets of snow and ice, probably caused chiefly by uplifts of the land as extensive high plateaus, receiving snowfall throughout the year. But in other parts of the world, and especially in its lower temperate and tropical regions, all the climatic conditions were doubtless then nearly as now, permitting plants and animals to survive and flourish until the departure of the ice-sheets gave them again opportunity to spread over the northern lands.

High preglacial elevation of the drift-bearing regions is known by the depths of fjords and submerged continuations of river valleys, which on the Atlantic, Arctic, and Pacific coasts of the north part of North America show the land to have been elevated at least 2,000 to 3,000 feet higher than now. In Norway the bottom of the Sogne fjord, the longest and deepest of the many fjords of that coast, is 4,000 feet below the sea level. Previous to the Glacial period or Ice Age, and doubtless causing

its abundant snowfall, so high uplift of these countries had taken place that streams flowed along the bottoms of the fjords, channeling them as very deep gorges on the borders of the land areas.

Under the vast weight of the ice-sheets, however, the lands sank to their present level or mostly somewhat lower, whereby the temperate climate, with hot summers, properly belonging to the southern portions of the ice-clad regions, was restored. The ice-sheets were then rapidly melted away, though with numerous pauses or sometimes slight readvances of the mainly receding glacial boundary.

Nearly all of Minnesota is overspread by the glacial drift, the only exception being a relatively narrow unglaciated area bordering the Mississippi river from Lake Pepin southward and extending into Wisconsin and Iowa. North of Lake Superior the drift on some tracts is thin, and its average depth there probably does not exceed 50 feet. On the western four-fifths of the state it averages from 100 to 150 feet in thickness, almost everywhere concealing the bed rocks, which generally had been subaerially eroded in preglacial time to an approximately flat or only moderately hilly surface.

Small knobs and hillocks of rock, which had been spared by the preglacial erosion were worn down and leveled by the ice-sheet in its very slow southward movement, and its drift was filled into the preglacial valleys, so that the contour of the drift-enveloped country is now mainly more uniform than it was before the Ice age.

But on certain belts the drift was left in hills and ridges, accumulated during the closing stage of the Glacial period along the margin of the ice wherever it halted in its general retreat or temporarily readvanced. Upon the greater part of Minnesota the only hills are formed of this morainic drift, ranging in height commonly from 25 to 75 or 100 feet, but occasionally attaining much greater altitude, as in the Leaf hills, which rise from 100 to 350 feet above the moderately undulating country on each side.

Unstratified glacial drift, called till or boulder clay, which was laid down by the ice-sheet without modification by water trans-

portations, assorting, and deposition in beds, forms the surface of probably two-thirds, or a larger part, of Minnesota. It consists of boulders, gravel, sand, and clay, mingled indiscriminately together in a very hard and compact formation, which therefore is frequently called "hardpan." The boulders of the till are usually so plentiful that they are sprinkled somewhat numerously on its surface; yet they are seldom more, on the large portions of the country which are adapted for agriculture, than the farmer needs to use, after clearing them from his fields, for the foundations of buildings and for walling up his cellar and well. They are rarely abundant enough to make walls for the inclosure of the fields, as in New England.

The moraine belts of knolly and hilly till have far more abundant boulders than are found on its more extensive comparatively smooth tracts. Wherever the vicissitudes of the wavering climate caused the chiefly waning border of the ice-sheet to remain nearly stationary during several years, the outflow toward the melting steep frontal slope brought much drift which had been contained in the lower part of the ice, heaping it finally in hills and ridges along the ice margin. Twelve of these marginal belts of drift knolls and hills have been traced in irregularly looped courses across Minnesota, as described and mapped in the reports of the state geological survey.

About a third part of the entire mantle of drift consists of the deposits called modified drift, being waterworn and stratified gravel, sand, and clay or silt, which were washed away from the drift upon and beneath the retreating ice-sheet by the streams due to its melting and to accompanying rains. Hillocks and ridges of gravel and sand (called kames and eskers), sand plateaus and plains, and the valley drift (varying from very coarse gravel to very fine clay, often eroded so that its remnants form terraces), are the principal phases of the modified drift. In being derived directly from the ice-sheet, these deposits had the same origin as the glacial drift forming the common till and the greater part of the marginal moraines; but they were modified, large boulders being not included, while the gravel and finer portions were brought, further pulverized or rounded, and assorted in layers, by water.

GLACIAL LAKE AGASSIZ.

When the departing ice-sheet, in its melting off the land from south to north, receded beyond the watershed dividing the basin of the Minnesota river from that of the Red river, a lake, fed by the glacial melting, stood at the foot of the ice fields, and extended northward as they withdrew along the valley of the Red river to Lake Winnipeg, filling this broad valley to the height of the lowest point over which an outlet could be found. Until the ice barrier was melted on the area now crossed by the Nelson river, thereby draining this glacial lake, its outlet was along the present course of the Minnesota river. At first its overflow was on the nearly level undulating surface of the drift, 1,100 to 1,125 feet above the sea, at the west side of Traverse and Big Stone counties; but in process of time this cut a channel there, called Brown's Valley, 100 to 150 feet deep and about a mile wide, the highest point of which, on the present water divide between the Mississippi and Nelson basins is 975 feet above the sea level. From this outlet the valley plain of the Red river extends 315 miles north to Lake Winnipeg, which is 710 feet above the sea. Along this entire distance there is a very uniform continuous descent of a little less than one foot per mile.

The farmers and other residents of this fertile plain are well aware that they live on the area once occupied by a great lake, for its beaches, having the form of smoothly rounded ridges of gravel and sand, a few feet high, with a width of several rods, are observable extending horizontally long distances upon each of the slopes which rise east and west of the valley plain. Hundreds of farmers have located their buildings on these beach ridges as the most dry and sightly spots on their land, affording opportunity for perfectly drained cellars even in the most wet spring seasons, and also yielding to wells, dug through this sand and gravel, better water than is usually obtainable in wells on the adjacent clay areas. While each of these farmers, in fact everyone living in the Red river valley, recognizes that it is an old lake bed, few probably know that it has become for this reason

a district of special interest to geologists, who have traced and mapped its upper shore along a distance of about 800 miles.

Numerous explorers of this region, from Long and Keating in 1823, to Gen. G. K. Warren in 1868 and Prof. N. H. Winchell in 1872, recognized the lacustrine features of this valley; and the last named geologist first gave what is now generally accepted as the true explanation of the lake's existence, namely, that it was produced in the closing stage of the Glacial period by the dam of the continental ice-sheet at the time of its final melting away. As the border of the ice-sheet retreated northward along the Red river valley, drainage from that area could not flow as now freely to the north through Lake Winnipeg and into the ocean at Hudson Bay, but was turned by the ice barrier to the south across the lowest place on the watershed, which was found, as before noted, at Brown's Valley, on the west boundary of Minnesota.

Detailed exploration of the shore lines and area of this lake was begun by the present writer for the Minnesota Geological Survey in the years 1879 to 1881. In subsequent years I was employed also in tracing the lake shores through North Dakota for the United States Geological Survey, and through southern Manitoba, to the distance of 100 miles north from the international boundary, for the Geological Survey of Canada. For the last named survey, also, Mr. J. B. Tyrrell extended the exploration of the shore lines more or less completely about 200 miles farther north, along the Riding and Duck mountains and the Porcupine and Pasquia hills, west of lakes Manitoba and Winnipegosis, to the Saskatchewan river.

This glacial lake was named by the present writer in the eighth annual report of the Minnesota Geological Survey, for the year 1879, in honor of Louis Agassiz, the first prominent advocate of the theory of the formation of the drift by land ice. Its outflowing river, whose channel is now occupied by lakes Traverse and Big Stone and Brown's Valley, was also named by me, in a paper read before the American Association for the Advancement of Science at its Minneapolis meeting in 1883 as the River Warren, in commemoration of General Warren's ad-

mirable work in the United States Engineering Corps, in publishing maps and reports of the Minnesota and Mississippi river surveys. Descriptions of Lake Agassiz and the River Warren were somewhat fully given in the eighth and eleventh annual reports of the Minnesota Geological Survey, and in the first, second, and fourth volumes of its final report; and more complete descriptions and maps of the whole lake, in Minnesota, North Dakota, and Manitoba, were published in 1895 as Monograph XXV of the United States Geological Survey.

Several successive levels of Lake Agassiz are recorded by distinct and approximately parallel beaches, of gravel and sand, due to the gradual lowering of the outlet by the erosion of the channel at Brown's Valley, and these are named principally from stations on the Breckenridge and Wahpeton line of the Great Northern railway, in their descending order, the Herman, Norcross, Tintah, Campbell, and McCauleyville beaches, because they pass through or near these stations and towns. The highest or Herman beach is traced in Minnesota from the northern end of Lake Traverse eastward to Herman, and thence northward, passing a few miles east of Barnesville, through Muskoda, on the Northern Pacific railway, and around the west and north sides of Maple lake, which lies about twenty miles east-southeast of Crookston, beyond which it goes eastward to the south side of Red and Rainy lakes. In North Dakota the Herman shore lies about four miles west of Wheatland, on the Northern Pacific railway, and the same distance west of Larimore, on the Pacific line of the Great Northern railway. On the international boundary, in passing from North Dakota into Manitoba, this shore coincides with the escarpment or front of the Pembina Mountain plateau; and beyond passes northwest to Brandon on the Assiniboine, and thence northeast to the Riding Mountain.

Leveling along this highest beach shows that Lake Agassiz, in its earliest and highest stage, was nearly 200 feet deep above Moorhead and Fargo; a little more than 300 feet deep above Grand Forks and Crookston; about 450 feet above Pembina, St. Vincent, and Emerson; and about 500 and 600 feet, respectively, above lakes Manitoba and Winnipeg. The length of Lake Agas-

siz is estimated to have been nearly 700 miles, and its area not less than 110,000 square miles, exceeding the combined areas of the five great lakes tributary to the St. Lawrence.

After the ice border was so far melted back as to give outlets northeastward lower than the River Warren, numerous other beaches marking these lower levels of the glacial lake were formed; and finally, by the full departure of the ice, Lake Agassiz was drained away to its present representative, Lake Winnipeg.

The earliest Herman beach has a northward ascent of about a foot per mile, but the lowest and latest beaches differ only very slightly from perfect horizontality. It is thus known that a moderate uplift of this area, increasing in amount from south to north, was in progress and was nearly or quite completed while the ice-sheet was melting away. Before the Glacial period, all the northern half of our continent had been greatly elevated, producing at last the cold and snowy climate and the thick ice-sheet; in a late part of that period the land was depressed under the weight of the ice, which in consequence melted away; and latest, at the same time with the departure of the ice-sheet, the unburdened land rose a few hundred feet, the uplift having a gradual increase toward the central part of the country formerly ice-covered.

In comparison with the immensely long and ancient geologic periods that had preceded, the final melting of the ice-sheet, the deposition of its marginal moraines and other drift formations, its fringing glacial lakes, and the attendant uplifting of the land, occupied little time and were very recent. The entire duration of Lake Agassiz, estimated from the amount of its wave action in erosion and in the accumulation of beach gravel and sand, appears to have been only about 1,000 years, and the time of its existence is thought to have been somewhere between 6,000 and 10,000 years ago.

GEOLOGIC TIME RATIOS.

It is comparatively easy to determine the ratios or relative lengths of the successive geologic eras, but confessedly very

difficult to decide beyond doubt even the approximate length in years of any part of the records of the rock strata. The portions for which we have the best means of learning their lengths are the Ice Age and subsequent time. If we can ascertain somewhat nearly what has been the duration since the oncoming of the Glacial period, it will serve as a known quantity to be used as the multiplier in the series of ratios, for giving the approximate or probable measures in years for the recedingly earlier and far longer Tertiary, Mesozoic or Secondary, Paleozoic or Primary, and Archean or Beginning eras, which last takes us back almost or quite to the time when the cooling molten earth became first enveloped with a solid crust.

The ratios reached by Professors J. D. Dana and Alexander Winchell, from the thickness of the rock strata, are closely harmonious, the supposed durations of Paleozoic, Mesozoic, and Cenozoic time being to each other as 12:3:1. Dana further ventured a supposition that these three vast eras, from the Cambrian down until now, may comprise some 48,000,000 years, which would give for the Paleozoic era 36,000,000 years; the Mesozoic, 9,000,000; and the Cenozoic, 3,000,000. He disclaimed, however, any assumption that these figures are "even an approximate estimate of the real length of the interval, but only of relative lengths, and especially to make apparent the fact that these intervals were *very long.*"

Professor W. M. Davis, without speaking definitely of the lapse of time by years, endeavors to give some conception of what these and like estimates of geologic ratios really mean, through a translation of them into terms of a linear scale. Starting with the representation of the Postglacial or Recent period, since the North American ice-sheet was melted away, as two inches, he estimates that the beginning of the Tertiary erosion of the Hudson river gorge through the Highlands would be expressed by a distance of ten feet; that the Triassic reptilian tracks in the sandstone of the Connecticut Valley would be probably 50 feet distant; that the formation of the coal beds of Pennsylvania would be 80 or 100 feet back from the present time; and that the Middle Cambrian trilobites of Braintree, Mass., would be 200, 300, or 400 feet from us.

Having such somewhat definite and agreeing ratios, derived from various data by different investigators, can we secure the factor by which they should be multiplied to yield the approximate duration of geologic periods and eras in years? If on the scale used by Professor Davis we could substitute a certain time for the period since the departure of the ice-sheet, we should thereby at once determine, albeit with some vagueness and acknowledged latitude for probable error, how much time has passed since the Triassic tracks were made, the coal deposited, and the trilobites entombed in the Cambrian slates. Now just this latest and present division of the geologic record, following the Ice Age, is the only one for which geologists find sufficient data to permit direct measurements or estimates of its duration. "The glacial invasion from which New England and other northern countries have lately escaped," remarks Davis, "was prehistoric, and yet it should not be regarded as ancient."

In various localities we are able to measure the present rate of erosion of gorges below waterfalls, and the length of the postglacial gorge divided by the rate of recession of the falls gives approximately the time since the Ice Age. Such measurements of the gorge and Falls of St. Anthony by Prof. N. H. Winchell show the length of the Postglacial or Recent period to have been about 8,000 years; and from the surveys of Niagara Falls, Prof. G. F. Wright and the present writer believe it to have been 7,000 years, more or less. From the rates of wave-cutting along the sides of Lake Michigan and the consequent accumulation of sand around the south end of the lake, Dr. E. Andrews estimates that the land there became uncovered from its ice-sheet not more than 7,500 years ago. Professor Wright obtains a similar result from the rate of filling of kettle-holes among gravel knolls and ridges, and likewise from the erosion of valleys by streams tributary to Lake Erie; and Prof. B. K. Emerson, from the rate of deposition of modified drift in the Connecticut Valley at Northampton, Mass., thinks that the time since the Glacial period cannot exceed 10,000 years. An equally small estimate is also indicated by the studies of Gilbert and Russell for the time since the highest rise of the Quaternary lakes Bonneville

and Lahontan, lying in Utah and Nevada, within the Great Basin of interior drainage, which are believed to have been contemporaneous with the great extension of ice-sheets upon the northern part of our continent.

Professor James Geikie maintains that the use of paleolithic implements in the Stone Age had ceased, and that early man in Europe made neolithic (polished) implements, before the recession of the ice-sheet from Scotland, Denmark, and the Scandinavian peninsula; and Prestwich suggests that the dawn of civilization in Egypt, China, and India, may have been coeval with the glaciation of northwestern Europe. In Wales and Yorkshire the amount of denudation of limestone rocks on which boulders lie has been regarded as proof that a period of not more than 6,000 years has elapsed since the boulders were left in their positions. The vertical extent of this denudation, averaging about six inches, is nearly the same with that observed in the southwest part of the Province of Quebec by Sir William Logan and Dr. Robert Bell, where veins of quartz worn by glaciation stand out to various heights not exceeding one foot above the weathered surface of the inclosing limestone.

From this wide range of concurrent but independent testimonies, we may accept it as practically demonstrated that the period since the ice-sheets disappeared from North America and Europe measures some 6,000 to 10,000 years. Within this period are comprised the successive stages of man's development of the arts, from the time when his best implements were polished stone through ages of bronze, iron, and finally steel, to the present time, when steel, steam, and electricity bring all nations into close alliance.

Having thus found the value of one term in our ratios of geologic time divisions, we may know them all approximately by its substitution. The two inches assumed to represent the postglacial portion of the Quaternary era may be called 8,000 years; on the same scale, according to the proportional estimates by Davis, the Triassic period was probably 2,400,000 years ago; the time since the Carboniferous period, near the end of the Paleozoic era, has been about four or five millions of years;

and since the middle of the Cambrian period, twice or perhaps four times as long. Continuing this series farther back in agreement with the scale thus suggested by Davis, the earliest Cambrian fossils would be 20 or 25 millions of years old, and the beginning of life on the earth about twice as long ago.

To substitute our measure of postglacial time in Dana's ratios, we must first ascertain its proportion to the preceding Glacial period, and then the ratio which these two together bear to the Tertiary era. From various estimates of the relative ages of different portions of the drift sheets, we have the probable length of Glacial and Postglacial time together 75.000 or 100,000 years, more or less; but a probably long preceding time, while the areas that became covered by ice were being uplifted to high altitudes, may perhaps with good reason be also included in the Quaternary era, which then would comprise some 150,000 years. In comparing the Tertiary era with the Quaternary, the best means for learning their ratio I think to be found in the changes of faunas and floras since the beginning of Tertiary time, using especially the marine faunas as most valuable for this comparison. Scarcely any species of marine mollusks have become extinct or undergone important changes during the Glacial and Recent periods, but since the Eocene dawn of the Tertiary nearly all these species have come into existence. Judged upon this basis, the Tertiary era seems at least thirty or forty times longer than the Ice Age and subsequent time; in other words, it may well have lasted two millions or even four millions of years.

If we take the mean of these numbers, or three million years, for Cenozoic time, or the Tertiary and Quaternary ages together, we have precisely the value of Professor Dana's ratios which he assumed for conjectural illustration, namely, 48,000,000 years since the Cambrian period began. But the diversified types of animal life in the earliest Cambrian faunas surely imply a long antecedent time for their development, on the assumption that the Creator worked then as during the subsequent ages in the evolution of all living creatures. According to these ratios therefore, the time needed for the deposition of the earth's stratified rocks and the unfolding of its plant and animal life must be about 100,000,000 years.

The gneisses and schists which form large areas of northern Minnesota probably belong to the earliest crust of the originally molten and then fast cooling earth, a hundred million years or longer ago. The trappean rocks and Cambrian sandstone and shales cut through by the St. Croix river at Taylor's Falls are probably fifty million years old, more or less; and the abundantly fossiliferous Trenton limestone of St. Paul and Minneapolis is perhaps two-thirds as old, each being far more ancient than the great coal deposits of the closing part of Paleozoic time. After coming forward to the Cretaceous marine submergence of the greater part of Minnesota, only some three to five million years remain between that time and the present. Much nearer to our own day, a continental uplift, terminating the Tertiary and introducing the Quaternary era, began perhaps a seventh or a sixth part of a million years ago, and in its culmination, estimated to have been about a hundred thousand years ago, was the chief cause of the Ice Age.

Compared with these almost inconceivable geologic periods, a man's life, or even the period of written history, seems like the narrow span measured by an outspread hand; but a new and grander meaning comes into the words, "Of old hast Thou laid the foundation of the earth."

Chapter III.

CLIMATE.

ALL the bounties that the earth yields to the farmer, dairyman, stock-raiser, fruit-grower, and florist, come from God as his gifts through the sunshine and the rain. To the climate also is due the division of this state in its great regions of forest and prairie, with their diversities of the fauna and flora. Thence came whatever the savage possessed, of game, fish, wild rice, berries, and the products of his rude agriculture, before the white man brought the arts of civilization.

The State of Minnesota, lying at the center of a great continent, has a thoroughly inland climate, with a wide contrast between the prevailingly cold winters and hot summers, but liable to sudden and considerable changes of temperature at any season. Rainfall and snowfall are less than in any of the states farther east, but more than in the Dakotas and other states of the western plains. The air generally contains little moisture, few days are continuously cloudy, and all parts of the year have much sunshine.

TEMPERATURE.

Some portions of each winter, for a few days together, or often through several weeks, have very cold temperature, with the mercury of the Fahrenheit thermometer sinking to ten, twenty, or thirty degrees below zero at night, and occasionally not rising so high as to zero at noon of an entirely sunshiny day.

But the dryness of the atmosphere makes such severe cold no more difficult to endure than temperatures twenty to thirty degrees higher in the northern states along our Atlantic coast.

Usually there is no considerable thawing at any time during two or three months of the winter; but sometimes a winter here is quite mild, with many alternations of thawing and freezing weather. The ordinarily scanty snowfall in the greater part of the state, which gives a sheet of snow seldom exceeding a foot in average depth, is likely to serve well, if not too much drifted by gales at the times of its fall, for sleighing and sledding through the whole period of steady cold. This season, too, is more sharply demarked than in most other parts of the United States. It is begun by a sudden cold wave, generally during the first half of November, which freezes the ground and stops the late autumn work of plowing; and the return of warmth in spring is by a sudden transition which rapidly melts away the snow and soon thaws and dries the land sufficiently to prepare it for the seeding of the broad wheat fields.

In the summer there are commonly only a few excessively hot days (80 degrees to 100 degrees F.) in a single heated term, which is preceded and followed by longer terms of agreeable coolness, even at midday. It is also important to note that, however hot the days may be, the nights, almost without exception, through the whole summer are cool and favorable for refreshing sleep. Excepting the few very hot days or weeks of the midsummer, the temperature generally is cool and invigorating through the six or seven months in which the land is worked and the harvest gathered.

During January, the coldest month, the average temperature is about 15 degrees Fahrenheit at the southeast corner of Minnesota; about 12 degrees at St. Paul and Minneapolis, and nearly the same at Duluth; and thence it diminishes northwestward to zero at the Lake of the Woods, and about two degrees below zero at St. Vincent and Pembina, situated on the Red river close to the international boundary.

The warmest month, July, has an average temperature of about 73 degrees along the southern border of this state; 74 de-

grees at St. Paul and Minneapolis; 68 degrees at Moorhead and Fargo; 65 degrees at St. Vincent; and 64 to 62 degrees in northeastern Minnesota, north of Lake Superior.

For the whole year, the southeast corner of the state has a mean temperature of about 46 degrees; St. Paul and Minneapolis, about 45 degrees; and northern Minnesota, 40 to 35 degrees.

RAINFALL AND SNOWFALL.

The mean annual precipitation of moisture as rain and snow in Minnesota ranges from about 30 to 20 inches. It is greatest in the southeast corner of the state and in the vicinity of Duluth; at St. Paul and Minneapolis it is about 28 inches; and it is least at the northwest corner of the state.

The most plentiful precipitaton is during the season of the growth of crops, increasing, on an average for the whole state, through the spring and in June, which is usually the most rainy month, with four to five inches of rainfall; and decreasing to about three inches and a half in July, nearly the same in August, and about three inches in September. But many years depart widely from these averages, there being sometimes during several consecutive years an excess and during other isolated or consecutive years a deficiency of rainfall. During all the sixty years since considerable agricultural settlements were first made in Minnesota, the rainfall and temperature, though showing marked contrasts in different years, have always been so favorable for farming that there has been no instance of failure to secure at least a generally remunerative harvest, while most of the years have yielded very abundantly.

A large portion of the rainfall is brought by thunder showers, which may occur at any hour of the day or night. Terms of cloudy and more or less rainy weather, due to broad storms that sweep from west to east, occasionally occupy one, two, or three days, or very rarely a whole week; but on the average, in all seasons of the year, this region has a large majority of clear and sunny days.

In addition to the recorded rainfall, seasons that have a considerable supply of rain, with at least a moderately humid atmosphere, receive much moisture in the form of the nightly dews, which greatly help the growth of crops; but in seasons of drought, with an arid atmosphere, when all vegetation gasps for moisture, the nights condense little or no dew.

In winter the snow is commonly about a foot deep during two or three months, from December or January to March. Sometimes it comes earlier or stays later, and very rarely it attains an average depth of two or three feet. Nearly every winter on the great prairies of southern and western Minnesota has from one to three or four severe storms, called blizzards, in which the snowfall is accompanied and followed by a fierce wind and often by very low temperature. The air is filled with flying grains of snow, by which the view to any considerable distance is obscured and the traveler finds his eyes soon blinded in attempting to move or look in the direction from which the storm comes. The earliest snows, which, however, are likely to be soon melted away, usually fall during November, but very rarely they come as early as the middle of September; and the latest snows vary in time from March to May.

FLUCTUATIONS OF LAKES AND STREAMS.

Through the past hundred years maximum and minimum stages of the Great Lakes, tributary to the St. Lawrence, have alternated in cycles of about a dozen years, during which comparatively scanty average rainfall for several years was followed by unusually abundant rainfall. Besides such short cycles, important secular changes of the mean annual precipitation in this state and throughout the Northwest, occupying considerably longer periods, have caused remarkable changes in the levels of numerous lakes which have no outlets.

Devil's lake, in North Dakota, thus shows evidence of having attained, about the year 1830, a level sixteen feet higher than its low stage in 1889, reaching at or near the former date to the line that limits the large and dense timber of its bordering

groves. Below that line are only smaller and scattered trees, of which the largest, being cut down, indicated by their rings of annual growth the approximate date of the former flood stage of the lake. This was near the time of the highest known flood of the Red river, in the spring of 1826, when its water rose five feet above the surface where the city of Winnipeg is now built. Likewise it may be noted that the highest known stage of the Laurentian lakes was in 1838, when Lake Erie stood six feet above its lowest recorded stage, which was in the winter of 1819-20.

Lake Como, also without an outlet, in the park of this name at St. Paul, fluctuated six feet and a half from its highest water level in 1873 to its lowest stage in 1892. During the next thirteen years this lake varied only one to two feet above its minimum stage; but in the last two years, from 1905 to 1907, it has gradually risen three feet, overflowing the lower parts of its shores, where many willows and other trees had been planted and had attained a fine growth.

Taking the average for this entire state, its mean annual rainfall, including the snowfall in its equivalent of rain, is about twenty-six inches, of which the far greater part, about three-fourths, is returned to the atmosphere and clouds by evaporation from the land and from the surfaces of the lakes and streams. Only a fourth part, or less, is carried into the sea by the rivers.

At the ordinary low stages of the great rivers, as the Mississippi and the Red River of the North, they carry only about a third of their average volume, which, on the other hand, is very far surpassed by the high flood stages of a few days or weeks in each year.

Itasca lake, until it was recently dammed for floating the lumbermen's logs down the shallow outflowing Mississippi river, had a yearly fluctuation of less than one foot; and the steadying effect of lakes Bemidji, Cass, and Winnebagoshish, always prevented any very great floods on the head stream of this river in northern and central Minnesota. The floods are now further controlled and diminished there by the reservoirs constructed by the United States government, which catch a large part of the

upper waters when most abundantly supplied by snow melting and rains in the spring.

At St. Paul the vertical fluctuation between extreme low water and the highest recorded flood stage of the Mississippi is 19 feet; at Lake Pepin it is 16 feet; and at Prairie du Chien and the mouth of the Wisconsin river it is 22 feet. The date of the maximum river flood thus registered at St. Paul was April 29, 1881; and at Lake Pepin and Prairie du Chien, June 16 to 22, 1880.

AIR CURRENTS.

The nearly level vast prairies, occupying a third part of Minnesota, are fully exposed to all currents of the air, and during the most windy months, which are in the spring and autumn, they seem very bleak to one who has previously lived only in districts where the surface mostly receives a partial shelter from the force of winds by the undulations of hills and vales and by the presence of forests and trees cultivated for ornament and shade. The movements of the atmosphere on this prairie district do not appear, however, to exceed in their aggregate amount those on the wooded part of the state, or on the basins of the great Laurentian lakes, or on the Atlantic seaboard. Exposed places throughout these areas, as the tops of hills, are quite as severely swept by gales as the prairies, where they are so much more observed in the common experience of the people. One of the most desirable improvements of the prairie homestead is the cultivation of rows of trees, called wind-breaks, about the buildings.

Winds, usually light, but on many days heavy, are moving almost continually over this area, with variations in their direction to every point of the compass. From the hourly records of the velocity of the winds as measured by self-registering anemometers, their mean rate of movement is found to be about six miles and a half per hour at St. Paul, seven miles and a quarter at Duluth, and nearly nine miles at St. Vincent.

With these means it will be instructive to compare the records of several stations in other parts of the country, which

show for Boston a mean velocity of about eleven miles per hour; New York City, nine miles; Chicago, also nine miles; St. Louis, ten miles and a half; New Orleans and Denver, each about seven miles; and San Francisco, about nine miles per hour.

One of the natural results of the air currents is an increase of evaporation, which restores directly to the atmosphere the greater part of the moisture received from it as rain and dew. A gift of power from the winds is utilized by windmills, many of which are used here by farmers and stockmen for pumping water from wells, and less commonly for grinding grain. The greatest gift from this source, shared and enjoyed by all, is the exhilarating freshness and healthfulness of our climate, making outdoor life and labor a delight.

Chapter IV.

FLORA AND FAUNA.

UPON every portion of the land area of the globe, the flora, or assemblage of species constituting its mantle of vegetation, is a very sensitive register of its aggregate climatic conditions and of the value of its soil for agriculture. In almost an equal degree, also, the fauna, or representation of animal life, testifies what the capabilities of the country will be for pasturage and stock raising, and what crops will be successfully cultivated by the farmer, even before the coming of the axman to fell the forest and of the plowman to draw the first furrow on the prairie. The vast herds of buffalo and the frequent droves of antelope and elk which roamed in Minnesota and on the western plains previous to the advent of the white man were a prognostication of the present wealth of cattle, horses, and sheep, feeding where the native tall game and the Indian hunter have so recently vanished. The nutritious and abundant grasses and other herbage on which the wild herds fed are now succeeded by luxuriant fields of grain, or, growing in the yet unbroken sward, they now fatten the beef, rear the broncho and thoroughbred horses, and produce the wool, which are exported to Chicago and more eastern markets.

Hennepin, Carver, Pike, and other early explorers of this state, occasionally refer to some of its forest trees, wild fruits and berries, and plants used for food or medicine by the Indians. Carver, who traveled to the upper part of the Minnesota river in 1767, wrote of the region through which it flows: "Wild rice

grows here in great abundance; and every part is filled with trees bending under their loads of fruits, such as plums, grapes, and apples; the meadows are covered with hops, and many sorts of vegetables; whilst the ground is stored with useful roots, with angelica, spikenard, and groundnuts." On the uplands bordering the river he saw "such amazing quantities of maples that they would produce sugar sufficient for any number of inhabitants."

Though no strongly defined line of division can be drawn between different portions of the flora and fauna of the country from the Atlantic to the Rocky mountains and from the Gulf of Mexico to the Arctic sea, it is nevertheless true that great contrasts exist between the eastern region, with its plentiful rainfall, and the dry western region, as also between the almost tropical southern margin of the United States and the tundras beneath the Arctic Circle. In traveling from the once wholly forest-covered country of the eastern states across the prairies to the far western dry and alkaline portions of the plains, bearing cacti and sagebrush, there is observed a gradual change in the flora, until a very large proportion of the eastern species is left behind, and their places are taken by others capable of enduring more arid conditions. Likewise in going from St. Augustine or New Orleans to Chicago, St. Paul, Winnipeg, and Hudson bay and strait, the palmettoes, the evergreen live oak, bald cypress, southern pines, and the festooned Tillandsia or "Spanish moss," are left in passing from the southern to the northern states, and instead we find in the region of the Laurentian lakes the bur or mossy-cup oak, the canoe and yellow birches, the tamarack or American larch, the black spruce, balsam fir, and the white, red, and Banksian pines, while farther north the white spruce, beginning as a small tree in northern New England and on Lake Superior, attains a majestic growth on the lower Mackenzie river in a more northern latitude than a large part of the moss-covered Barren Grounds which reach thence eastward to the northern part of Hudson bay and Labrador. Thus, although no grand topographic barrier, like a high mountain range, impassable to species of the lowlands, divides this great region, the transition

from a humid to an arid climate in passing westward, and the exchange of tropical warmth for polar cold in the journey from south to north, are accompanied by gradual changes of the flora by which in the aggregate its aspect is almost completely transformed.

In Minnesota, forming the central part of this large area, it is interesting to find the intermingling and the boundaries of species whose principal homes or geographic range lie respectively in the directions of the four cardinal points, east and west, south and north.

FOREST TREES AND SHRUBS.

Many species of trees which together constitute a large part of the eastern forests extend to Minnesota, reaching here the western or northwestern boundary of their range. Among these are the basswood, sugar maple, river maple, and red maple, the three species of white, red, and black ash, the red or slippery elm, and the rock or cork elm, the butternut, the white, bur, and black oaks, ironwood, the American hornbeam, the yellow birch, the large-toothed poplar, white and red pine, arbor-vitae, and the red cedar or savin. A few species of far northern range find in this district their southern or southwestern limit, namely, our two species of mountain ash, the balsam poplar, Banksian or jack pine, the black and the white spruce, balsam fir, and tamarack.

Some of the eastern shrubs which make the undergrowth of our forests also attain here their western limits; but a larger proportion of these than of the forest trees continues west along the stream courses to the Saskatchewan region, the upper Missouri, and the Black Hills. Among the shrubs that reach no farther westward, or at least southwestward, are the black alder or winterberry, the mountain holly, the staghorn sumach, the hardhack, the huckleberry, the dwarf blueberry and the tall or swamp blueberry, leatherwood, and sweet fern. Shrubs and woody climbers that have their northern or northwestern boundary in this state include the prickly ash, staff tree or shrubby

bittersweet, frost grape, Virginian creeper, and the four species of round-leaved, silky, panicled, and alternate-leaved cornel. On the other hand, shrubs of the north which here reach their southern or southwestern limits include the mountain maple, the few-flowered viburnum and withe-rod, several species of honeysuckle, the Canada blueberry, the cowberry, Labrador tea, the Canadian shepherdia, sweet gale, the dwarf birch, green or mountain alder, beaked hazelnut, black crowberry, creeping savin, and the American yew or ground hemlock.

No tree of exclusively western range extends east to Minnesota, and we have only a few western species of shrubs, of which the most noteworthy are the alder-leaved Juneberry or service berry (in Manitoba commonly called "saskatoon"), the silverberry, and the buffalo-berry. To these are to be added the shrubby evening primrose, which occurs chiefly as an immigrant weed, and the small-leaved false indigo, which abounds on moist portions of the prairies. The silverberry, usually called "wolf willow" in the Red River valley, is common or abundant there in Norman county and thence northward, forming patches ten to twenty rods long on the prairie, growing only about two feet high and fruiting plentifully, but in thickets becoming five to ten feet high. Its silvery whitish foliage and fruit make this shrub a very conspicuous and characteristic element of the Red River flora.

Of the 412 species in Sargent's *Catalogue of the Forest Trees of North America* [north of Mexico], 81 occur indigenously in Minnesota; but eight of these, though becoming trees in some portions of the United States, do not here attain a treelike size or habit of growth, while forty-eight become large trees, at least forty or fifty feet high. Besides these, about 125 indigenous species of shrubs belong to this flora, making its whole number of species of woody plants about 206.

LIMITATION OF THE FOREST.

The most important and conspicuous contrast presented by the vegetation covering different parts of Minnesota is its divi-

sion in forest and prairie. Forest covers the northeastern two-thirds of the state, approximately; while about one-third, lying at the south and southwest, and reaching in the Red River valley to the international boundary, is prairie. The line dividing these areas, having an almost wholly timbered region on its northeast side, and a region on its southwest side that is chiefly grassland, without trees or shrubs, excepting in narrow belts along the larger streams and occasional groves beside lakes, runs as follows. Entering the state from the north about fifteen miles east of St. Vincent, it extends south-southeastward to Red Lake Falls; thence southeast and south, to the east end of Maple lake; thence southwesterly along this lake, and from it south to the Sand Hill river; thence southeasterly to the White Earth Agency; thence southerly, by Detroit and Pelican Rapids, to Fergus Falls, which is situated half way from the north to the south line of the state; thence southeasterly, in a less direct and regular course, through Douglas, Stearns, Meeker, McLeod and Sibley counties, to the Minnesota river, and along that stream to Mankato and South Bend; thence easterly by Janesville, Waterville, and Morristown, to Faribault; thence northerly, turning backward, to Minneapolis and Anoka, the loop thus formed, inclosing Wright, Carver, Scott, and Le Sueur counties with parts of adjacent counties, being the boundary of the area well known as the Big Woods; and thence easterly, passing through Ramsey and Washington counties to Stillwater and Hudson, where it enters Wisconsin.

The Big Woods are principally made up of the following species of trees, arranged by Prof. N. H. Winchell in the estimated order of their abundance; white or American elm, basswood, sugar maple, black and bur oaks, butternut, slippery or red elm, soft or silver maple, bitternut, white and black ash, ironwood, wild plum, Juneberry, American crab-apple, common poplar or aspen, large-toothed poplar, tamarack (in swamps), box elder, black cherry, cottonwood (beside rivers and lakes), water beech, willows, hackberry, paper or canoe birch, yellow birch, white oak, and red cedar. Farther northward white, red and jack pines, black and white spruce, balsam fir and arbor-vitae

are conspicuous in the forest, intermingled with deciduous trees. Its shurbs include prickly ash, smooth sumach, frost grape, Virginian creeper, climbing bittersweet, red and black raspberries, chokeberry, prickly and smooth gooseberries, black currant, and species of cornel, wolfberry, honeysuckle, elder, viburnum, and hazelnut.

Groves of a few acres, or sometimes a hundred acres or more, occur here and there upon the prairie region beside lakes, and a narrow line of timber usually borders the streams; but in southwestern Minnesota many lakes and creeks, and even portions of the course of large streams, have neither bush nor tree in sight, and occasionally none is visible in a view which ranges from five to ten miles in all directions.

The contour of the prairie is as varied as that of the wooded region. Both these regions, excepting the very flat bed of the ancient Lake Agassiz now forming the broad valley plain of the Red river, have an undulating, rolling and hilly surface, in some tracts presenting a very rough contour of knolls, hills, and ridges of morainic drift that rise steeply 25 to 100 feet or more above the intervening hollows. It must also be added that the material forming the surface generally throughout this state, whether forest or prairie, is closely alike, being glacial and modified drift, with no important differences such as might cause the growth of forest in one region and of only grass and herbage in the other.

Since there is so great similarity of the two regions in their topographic features and geologic formations, including the drift deposits which generally conceal the bed rocks, we must ascribe the limitation of the forest to other causes. The usually abrupt transition from the timbered to the prairie country and the general absence of trees and shrubs in the prairie region have been often attributed to the effect of fires. Through many centuries previous to the agricultural settlement of the country, fires almost annually swept over these vast prairies, generally destroying all seedling trees and shrubs, and sometimes extending the border of the prairie by adding tracts from which the forest had been burned. Late in autumn and again in the spring

the dead grass of the prairie burned very rapidly, so that a fire within a few days sometimes spread fifty or a hundred miles. The groves that remained in the prairie region were usually in a more or less sheltered position, being on the borders of lakes and streams, and sometimes nearly surrounded by them, while areas that could not be reached by fires, as islands, were almost always wooded.

Yet it does not appear that fires in the western portion of the great forest region of the United States are more frequent or destructive than eastward; and our inquiry must go back a step further to ask why fires east of the Appalachian mountains had nowhere exterminated the forest, while so extensive areas of prairie have been guarded and maintained, though not apparently produced, by prairie fires here. Among the conditions which have led to this difference we must undoubtedly place first the greater amount and somewhat more equable distribution throughout the year of rain in the eastern states.

Evidence that an increase of moisture in the ground suffices to produce a heavy growth of forest trees in a principally prairie region, even without protection from the incursions of prairie fires, is afforded by the bluffs of the opposite sides of the valley of the Minnesota river. Timber is found in a nearly continuous though often very narrow strip bordering this stream through almost its entire course, but generally leaving much of the bottomland treeless. The bluffs on the northeast side of the bottomland have for the most part only thin and scanty groves or scattered trees. The southwestern bluffs, on the contrary, are heavily wooded through Blue Earth and Brown counties, excepting two or three miles at New Ulm. They also are frequently well timbered in Redwood and Yellow Medicine counties, but in Lac qui Parle county they are mostly treeless and have only occasional groves. The greater abundance of timber on the southwestern bluffs appears to be due to their being less exposed to the sun, and therefore more moist, than the bluffs at the opposite side of the valley. Above Montevideo the timber is mainly restricted to a narrow belt beside the river and to tributary valleys and ravines.

PRAIRIE GRASSES AND FLOWERS.

About a hundred and twenty-five indigenous species of grasses have been identified in the flora of this state. While all of these are found in our prairie region, many also grow in favorable situations throughout the mainly wooded area.

Besides the grasses, all parts of the state, and most noticeably the prairies, bear multitudes of native flowers of showy red, purple, blue, yellow, and orange hues, and pure white, which bloom from early spring till the severe frosts of autumn. Earliest of all is the pasque flower, named for its blooming at Easter, common over all the prairie region. With this, or later in the spring, are other species of windflowers, the wild columbine, indigenous buttercups, violets, and many more.

During the summer the prairies are decked with species of larkspur, false indigo, prairie clover, vetch, rose, evening primrose, blazing star, aster, golden-rod, sunflower, harebell, gentian, phlox, gerardia, lily, spiderwort, etc. Often I have seen large tracts of the natural prairie yellow with sunflowers or golden-rod; other areas purple with prairie clover, blazing star, or gerardia, or blue with asters; and still others white with the profusely flowering northern galium.

Some of the species of aster and golden-rod continue in bloom from midsummer until the first severe frosts. Another very beautiful flower, blooming latest in the autumn, is the fringed gentian, which is common or frequent in both the wooded and prairie regions.

THE STATE FLOWER.

Minnesota has six species of the genus Cypripedium, which has been chosen as our state flower, named from Greek words meaning the shoe of Venus. This name, and also the common English and American popular names of this genus, as lady's slipper, moccasin flower, and Indian shoe, refer to the saccate and somewhat shoe-like form of the most conspicuous petal (in this Orchis family called the lip) of the flower.

About twenty-five species of Cypripedium are known, belonging to the north temperate zone and reaching south into Mexico and northern India. They are perennial herbs with perfect, irregular flowers, which are solitary or few.

All the species belonging to the northern United States and Canada, east of the Rocky mountains, are found in this state. These are the ram's head moccasin flower, with red and whitish veiny lip; a second species, bearing small white flowers; a third, having small yellow flowers; another, with much larger yellow flowers; a fifth species, with most showy, large flowers, of mingled white and pink purple color; and the sixth, named the stemless moccasin flower, with leaves on the ground and a large rose-purple flower on an erect scape nearly a foot high. These plants grow preferably in cold and moist woods and in bogs, flowering from May to July. The first and second are rare or infrequent; but the other four are frequent or common, especially northward.

GAME AND FUR-BEARING ANIMALS.

The buffalo, or American bison, formerly ranged in great herds over the prairies of Minnesota, but this noble species has now been almost exterminated. Instead of its countless numbers upon the western plains only forty years ago, it is now reduced to herds of only a few hundred survivors in the Yellowstone National Park and in northwestern Canada. In 1823 thousands of buffalos were encountered by the expedition of Major Long in the vicinity of lakes Big Stone and Traverse; and their herds roamed in southwestern Minnesota and in the Red river valley until 1850 or somewhat later. Stragglers are said to have been seen in the southwest part of this state as late as 1869.

The moose, our largest species of the deer family, still exists in considerable numbers in the northern woods; but the elk, which once was common or frequent, especially along the borders of the great prairie area, is very rare, remaining only at the far north, or perhaps this species has quite disappeared with the advance of the white settlements.

Our other Minnesota species of deer are the woodland caribou, or American reindeer, still found sparingly in the region north and northwest of Lake Superior; the common or Virginia deer, of wider range and greater numbers, which was once common throughout this state, but now is found only in its northeastern half; and the pronghorn antelope, which fed in small flocks on our southwestern prairies, but was driven farther west many years ago.

The hare family is represented in western Minnesota by the large prairie hare, called the jack rabbit; and by the common rabbit and the varying hare, or white rabbit, these species being abundant throughout the state.

Six species of squirrel, the gray, the fox squirrel, the red or chickaree, the common chipmunk, the Rocky mountain or Asiatic chipmunk, and the flying squirrel, are found, but not very plentifully, in the northern wooded part of the state. The most common species is the chickaree, whose range reaches southward through the Big Woods, and west along the timbered valleys of the prairie country to Big Stone lake.

The Canada porcupine or hedgehog is found sparingly northeastward, having nearly the same geographic range as the pine forests.

In the same northeastern region the black bear is still found somewhat frequent, though persistently hunted by the farmer and sportsman, not less for the glory of his capture than for his meat and fur.

Beavers, most highly valued among all our fur-bearing animals, are now nearly extinct here, but were formerly plentiful throughout the greater part of the state. They were most abundant in the northern forests, but also frequent or common along the wooded stream courses of the adjoining prairie country. Their skins were the chief staple of the fur trade, which was the incentive of the earliest exploration and was the main industry and commercial interest of this region during nearly two hundred years.

Other species of our fauna which are hunted or trapped for their furs are the otter, mink, muskrat, racoon, marten or sable, skunk, badger, fox, wolverine, wolf, and wild cat.

THE GOPHERS AND THE STATE SOBRIQUET.

Minnesota receives its most widely known sobriquet, "The Gopher State," from the striped gopher, a common species throughout our prairie region. Another and larger species of the same genus, the gray gopher, was formerly abundant in the southern part of the state, but has been mostly exterminated since the land became occupied by farms. The pouched or pocket gopher, belonging to another genus, seldom seen but known by the little heaps of fresh earth thrown up where it burrows, was also formerly plentiful southward and westward.

The peculiar origin of this nickname of the state, whence its people too are often called "Gophers," has been recorded by the late Judge Charles E. Flandrau in his *History of Minnesota.* An inconsiderate enthusiasm in 1857 led the voters to pledge the credit of the territory and future state in vast issues of bonds for building railroads here, the limit of the public indebtedness so authorized being set at $5,000,000. This popular infatuation was deeply regretted afterwards and became during many years a reproach and dishonor to the otherwise fair fame of the state, because it could not redeem the bonds so issued, until at last their payment was adjusted in 1881. Why the nickname came into vogue is told by Judge Flandrau as follows:

> The opponents of the measure published a cartoon to bring the subject into ridicule, which was very generally circulated throughout the State, but failed to check the enthusiasm in favor of the proposition. This cartoon represented ten men in a line with heads bowed down with the weight of a bag of gold hung about their necks marked "$10,000." They were supposed to represent the members of the Legislature who had been bribed to pass the act, and were called "primary directors." On their backs was a railroad track, upon which was a train of cars drawn by nine gophers, the three gophers in the lead proclaiming, "We have no cash, but will give you our drafts." Attached to the rear of the train was a wheelbarrow with a barrel on it marked "gin," followed by the devil in great glee, with his thumb at his nose. In the train were the advocates of the bill, flying a flag bearing these words: "Gopher train; excursion train; members of extra session of Legislature free. We develop the resources of the country," and over this was a smaller flag with the words, "The $5,000,000 Loan Bill."

During two or three years previous the selection of a suitable sobriquet for the state had been debated, some proposing to call it the Beaver State. The cartoon decided the question and gave the nickname of "Gopher," which Minnesota and her people have ever since retained.

STATE PUBLICATIONS.

Numerous reports relating to the flora and fauna have been published by the Geological and Natural History Survey of this state. Some of these are of chief interest and value to specialists, or to students of botany and zoology; but the following may be mentioned with recommendation for perusal by the general reader.

A Catalogue of the Flora of Minnesota, compiled by the present writer, in 193 pages, with a map of the forest and prairie areas and showing also approximate geographic limits of some of our principal trees and shrubs, was published in 1884 in the Twelfth Annual Report of the Survey. This catalogue enumerates 1,650 species, of which 138 are introduced plants, not originally found in the native flora. The geographic range and the degree of abundance or rarity of each species are noted.

The Metaspermae of the Minnesota Valley, an elaborate monograph on the higher seed-producing plants native to the valley or drainage basin of the Minnesota river, by Prof. Conway MacMillan, in 826 pages, was published in 1892 as the first report in the Botanical Series of this Survey. Large parts of the Big Woods and of the prairie region are included in the area of this report, which catalogues 1,174 indigenous species and varieties of plants growing there.

Two later reports in this series, of great interest to ordinary readers as well as to scientists, are *Minnesota Plant Life,* by Professor MacMillan, in 568 pages, with many fine illustrations from drawings and photographs, published in 1899; and *Minnesota Plant Diseases,* by Prof. E. M. Freeman, in 432 pages, also very fully illustrated, relating mostly to fungi, blights, mildews, and rusts, published in 1905.

Other large volumes in the same series are entitled *Minnesota Botanical Studies,* comprising many papers and reports of special investigations by professors and students in this department of the State University.

The late Prof. Clarence L. Herrick, in his excellent report, *The Mammals of Minnesota,* 299 pages, published in 1892, described sixty-three species of mammals known in this state. Six of these species are noted as chiefly of more northern geographic range; eight are western species; twenty-five range from Minnesota eastward; and twenty-four are of wide general distribution in North America. Twenty-one species are stated to be of economic value; and twenty-four may be regarded as injurious to the agriculturist. Eight species, making up an eighth part of the mammalian fauna, are reported as rapidly approaching extinction.

With the first report of the State Zoologist, Prof. Henry F. Nachtrieb, a very valuable work by the late Dr. P. L. Hatch, *Notes on the Birds of Minnesota, with Specific Characters,* in 487 pages, was published also in 1892. Three hundred and three species of birds are described as known to occur in this state. Some are only very rarely found here, and many are birds of passage, spending only a part of the year in Minnesota, either wintering at the south or migrating far northward for the summer.

Dr. Thomas S. Roberts, of Minneapolis, contributing a paper on "The Winter Birds of Minnesota" in the Ninth Annual Report of the Geological and Natural History Survey, for the year 1880, enumerated twenty-three species observed here as permanent residents, nine others which breed here and sometimes remain throughout the year, fourteen which are winter visitants from the north, and six which are only very exceptionally found here in the winter, making in all fifty-two species. During thirty years Dr. Roberts has been a field observer and photographer of our bird fauna, and he is preparing a most complete illustrated report for publication by the state.

A Preliminary Report on the Fishes of Minnesota, by Prof. Ulysses O. Cox, of Mankato, in 93 pages, was published in the

Zoological Series of the state survey in 1897, enumerating and describing a hundred and four species and six additional varieties of fishes known in our lakes and streams.

Hon. Wallace B. Douglas well remarks, "In the future, from a sportsman's or tourist's standpoint, when game as a whole must diminish, the wealth of Minnesota will lie in its lakes and fish."

Chapter V.

THE RED MEN.

ORIGIN AND ANTIQUITY OF THE RED RACE.

THE aboriginal American people seem to most students worthy of classification as a distinct race, although it may be admitted that they are most nearly allied with the Mongoloid or yellow race. In respect to these definite terms of color, it should be noted that they signify merely very swarthy complexions, tinged in Asia more or less with yellow, and in America with a reddish or copper hue. The American race, in all its diversity, from the Eskimos and the savage tribes of the United States to the half-civilized ancient Aztecs and Peruvians, and to the almost gigantic but squalid Patagonians and the Fuegians, has, beneath the tribal variations, much resemblance in form and features, and in the general structure and spirit, if we may so call it, of the many and diverse languages. Amid the variations of physical types and linguistic stocks, all the American peoples show evidences of interrelationship as a group. They are more allied with one another than with either of the three chief races, inhabiting the other side of the earth.

Whenever Japanese or other Asiatic sailors have been driven by storms to the North Pacific shores of our continent, as is known to have happened many times during hundreds of years past, the survivors have been mingled with the American tribes, without perceptible effect, beyond perhaps a few myths or some advancement in making weapons, utensils, or ornaments. There have also been frequent traverses of Bering strait by the Eski-

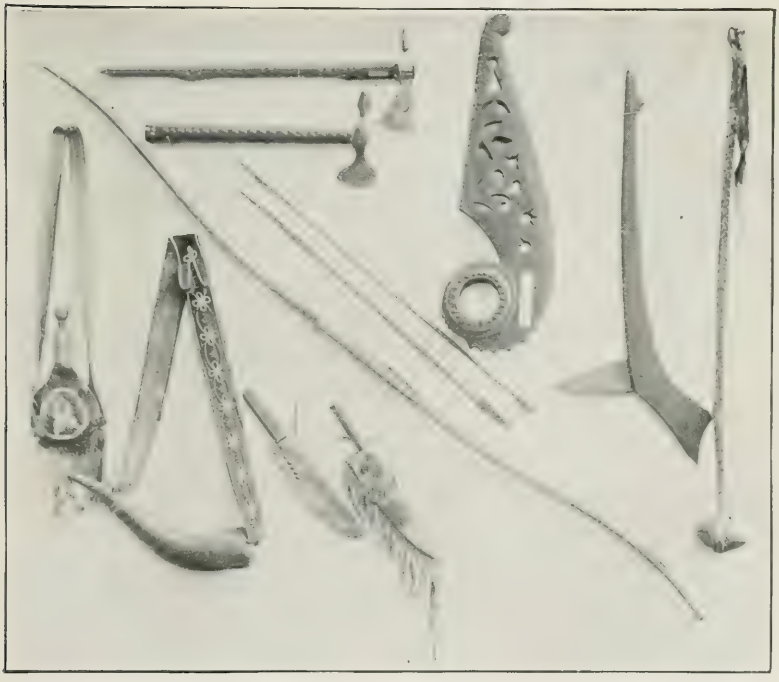
mos and their Asiatic neighbors, within the historic period, but without notable migration in either direction to modify the racial characteristics of either continent.

The original peopling of America appears to have taken place far longer ago by migration from northeastern Asia during the early Quaternary or Ozarkian epoch of general uplift of northern regions which immediately preceded the Ice Age, and which continued through the early and probably the greater part of that age. Then land undoubtedly extended across the present area of Bering sea.

During Ozarkian time and the long early part of the Glacial period, wandering tribes, migrating for better food supplies or to escape from enemies, could have crossed on land from Asia to Alaska, and could advance south to Patagonia and Tierra del Fuego, occupying all the ground (excepting the ice-covered area) that is now, or was in pre-Columbian times, the home of the American race. It is not improbable, too, that another line of very ancient migration, in the same early Pleistocene or Quaternary time, passed from western Europe by the Faroe islands, Iceland, and Greenland, to our continent.

An objection to migrations of primitive man during the Glacial period may be based on the ice-covered condition of North America at that time, this continent being enveloped by an ice-sheet upon its northern half, northward from the Ohio and Missouri rivers, excepting the greater part of Alaska. If the preglacial and early Glacial altitude of the continent had been the same as now, this objection would be valid, and we should be obliged to refer these ancient migrations wholly to a time before the accumulation of the North American ice-sheet, which reached both east and west beyond the present coast lines. But the depths of fjords and submarine continuations of river valleys show that the land elevation before the Glacial period, and through the greater part of that period, was at least 2,000 to 3,000 feet greater than now. During the epoch of ice accumulation and culmination, its boundaries probably failed to reach generally to the coast line of that time. Along the sea border, where food supplies such as savages rely upon are most easily

INDIAN CLAY VESSEL.



INDIAN WAR IMPLEMENTS.

obtained, preglacial and Glacial man may have freely advanced on a land margin skirting the inland ice, as along the present borders of Greenland. It was only in the Champlain epoch, closing the Glacial period, that the ice-burdened lands sank to their present altitude or lower, bringing the edges of the ice-sheet beneath the encroaching sea.

It is impossible to define closely the date of man's coming into America, but it is known to have preceded the end of the Glacial period. In the late Glacial gravel deposits of the Delaware valley at Trenton, N. J., under a beach ridge of gravel and sand formed by the Glacial Lake Iroquois in western New York, in the loess deposited during the Iowan stage of glaciation at Lansing, Kansas, and also in the loess of Nebraska and Iowa, in late Glacial valley drift of Ohio, in a similar flood-plain of the Mississippi river at Little Falls in central Minnesota, and in a beach ridge of the Glacial Lake Agassiz in northwestern Manitoba, geologists have found traces of man's presence during the decline and closing scenes of the Ice Age. As was noted in a preceding chapter of this volume, the continental ice-sheet was finally melted away probably between 6,000 and 10,000 years ago; but man had doubtless first come to occupy this continent at a much earlier time.

The many divergent branches of the American people and their remarkable progress toward civilization in Mexico, Central America, and Peru, before the discovery by Columbus, indicate for this division of mankind probably almost as great antiquity as in the eastern hemisphere, where many lines of evidence point to the origin and dispersion of men far longer ago than the six to ten thousand years which measure the Postglacial period. Although we are unable to define the date, in thousands of years of antiquity, when the American race came into its heritage, we may paradoxically say that it came here before it was differentiated from the primordial stock of mankind so as to be racially distinct.

Concerning the origin of the racial characters after the epoch of immigration to America, through the influences of climate, food, and other conditions of the New World, the most acceptable view is set forth by the late Major Powell, the founder

of the United States Bureau of Ethnology, in regard to the development of culture by this race. He wrote as follows:

> We are forced to the conclusion that the industrial arts of the American aborigines began with the simplest tools of stone, bone, and other material here in America itself, and that their development to that high degree of excellence attained by the tribes at the time of their discovery was indigenous. The industrial arts of America were born in America. America was inhabited by tribes at the time of the beginning of industrial arts; so that if we are to find a region or a people, from which the tribes of America sprang, in the eastern hemisphere, we can only conclude that they left the Old World before they had learned to make stone knives, spears, and arrowheads, or at least when they knew the art only in its crudest state. Thus, primitive man has been here ever since the invention of the stone knife and the stone hammer. How much longer, we cannot say.

Development of the physical and mental characteristics of the American race doubtless went forward in companionship with the development of their industries, tribal organization, and advancement toward civilization. All these changes, from a very low condition of savagery to semi-civilization in some districts, great diversity of tribal and national life, high skill in various handicrafts, and general contrast with the races of the Old World, took place, as I believe, after the aboriginal migration to America. The origin and specialization of the red race thus occupied probably almost as long time as the differentiation of the black, yellow, and white races; and their establishment was complete long before the pyramids of Egypt were built, and, indeed, long before the Aryan invaders of western Europe, in the later part of the Ice Age, brought the Neolithic arts, cultivated plants, domestic animals, and the Indo-European languages.

PRIMITIVE MAN IN THE ICE AGE AT LITTLE FALLS.

The first discovery of artificial quartz chips at Little Falls referable to the Glacial period was by Prof. N. H. Winchell thirty years ago, as published in his Sixth Annual Report of the Geological Survey of Minnesota, for 1877. This was only one or two years after the earliest American discoveries of stone im-

plements in glacial pravels, by Dr. Charles C. Abbott at Trenton, N. J. In 1878 the late Miss Franc E. Babbitt, of Little Falls, began careful collection and study of the abundant quartz flakes and infrequent implements occurring there in the upper part of the Mississippi valley gravel plain; and her observations and conclusions were published in 1883 in a paper read before the American Association for the Advancement of Science, which met that year in Minneapolis. Four years later this subject was presented before the Boston Society of Natural History by the present writer; and in 1889 my discussion there given was reprinted by Prof. G. Frederick Wright in *The Ice Age in North America.* Again in 1901 detailed investigations and geological review of the evidences of man at Little Falls in the latest stage of the Ice Age were made by the late Hon. J. V. Brower and Professor Winchell, their studies being published in 1902 by Brower in a finely illustrated memoir of 126 pages, entitled *Kakabikansing* (an Ojibway name signifying Little Falls).

It is found that at many places in and near Little Falls the glacial flood-plain contains flakes of white quartz, evidently artifically chipped in making implements, to depths of three or four feet. The Mississippi here flows over an outcrop of Huronian slate, and the same formation is also exposed by the Little Elk river near its mouth, on the west side of the Mississippi three miles north of Little Falls. Veins of white quartz occur in the slate at both these localities, and were doubtless the source of that used by man here, during the recession of the continental ice-sheet, for the manufacture of his quartz implements.

The Mississippi valley drift plain here is similar in material and origin with the modified drift terraces of the valleys of the Merrimack, Connecticut, and other rivers in New England. These watercourses extending southward from the region that was covered by the ice-sheet became the avenues of drainage from it during its retreat. A part of the drift which had been contained in the lower portion of the ice was then washed away by the streams formed on the ice in its rapid melting and was deposited as modified drift, forming layers of gravel, sand, and fine silt, in the valleys along which the floods supplied by this

melting descended toward the ocean. Along the Mississippi the ancient flood-plain of modified drift at Brainerd has a height of about 60 feet above the river; at Little Falls its height is 25 to 30 feet; at St. Cloud, 60 feet; at Clearwater and Monticello, 70 to 80 feet; at Dayton, 45 feet; and at Minneapolis, 25 to 30 feet above the river at the head of St. Anthony's Falls.

The modified drift at Little Falls lies on the till or direct deposit of the ice-sheet, and forms a surface over which the ice never readvanced. It is far within the area that was ice-covered in the latest or Wisconsin epoch of glaciation. The courses of the great marginal moraines then amassed along the boundaries of the waning ice-sheet wherever it temporarily paused, or perhaps sometimes readvanced, interrupting its recession, show its successive stages of departure, uncovering the land surface.

During the time of deposition of this valley drift in the vicinity of Little Falls, the front of the departing continental glacier was accumulating the eighth or Fergus Falls moraine and the ninth or Leaf Hills moraine, in the series of twelve morainic belts traced in their irregular courses across Minnesota. While the tenth, eleventh, and twelfth, or the Itasca, Mesabi, and Vermilion moraines, were being formed, crossing the lake region at the head of the Mississippi and farther north, the gravel and sand of the modified drift was probably wholly deposited north of Little Falls. Man therefore was here contemporaneous with the existence of the Glacial Lake Agassiz, and with the retreat of the ice-sheet from the northern part of this state.

Plants and animals doubtless followed close upon the retiring ice-border, and men living in the region southward would make journeys of exploration to that limit, but probably they would not take up their abode for all the year so near to the ice as Little Falls at the time of the Fergus Falls and Leaf Hills moraines. It may be that the chief cause leading men to occupy this locality, so soon after it was uncovered from the ice, was their discovery of the quartz veins in the slate there and on the Little Elk river, affording suitable material for making sharp-edged stone implements of the best quality. Quartz veins are

absent or very rare and unsuited for this use in all the rock outcrops of the south half of Minnesota that had become uncovered from the ice, as well as of the whole Mississippi basin southward, and this was the first spot accessible whence quartz for implement making could be obtained. The deposition of the valley drift at Little Falls, supplied from the melting ice-fields not far distant at the north, was still going forward while primitive men, ancestors of the Eskimos or the Indians, resorted there, and left, as the remnants of their manufacture of stone implements, multitudes of quartz fragments.

The flooded condition of the river, overspreading this sand and gravel plain and adding to its upper layers from the drift yielded by the melting ice-sheet, was doubtless maintained through all the warm portion of the year. But in spring, autumn, and winter, or, in exceptional years, through much of the summer, it seems probable that the river was confined to a channel, being of insufficient volume to cover its flood plain. At such times this valley at Little Falls was the site of human habitations and industry. After the complete disappearance of the ice from the basin of the upper Mississippi, the supply of both water and sediment was so diminished that the river, from that time till now, has been occupied more in erosion than in deposition, and has cut its channel far below the level at which it then flowed, excavating and carrying to the Gulf of Mexico a great part of its glacial flood-plain, the remnants of which are seen as high terraces or plains upon each side of the river.

THE MOUNDS AND THEIR BUILDERS.

Minnesota has probably more than ten thousand artificial earth mounds, mostly of rounded and gently or steeply sloping domelike form, varying in height usually from one or two feet to six or eight feet, but occasionally ten to fifteen feet high, or very rarely larger. Occurring sometimes singly, but commonly in groups of several or many, up to ten, twenty, or more, they are found principally along the large rivers and in the vicinity of lakes, where the fish and game afford sustenance. Often, as in

Mounds Park on Dayton's bluff of the Mississippi river valley in the east edge of the city of St. Paul, they are situated on the tops of bluffs or hills, where a very grand and inspiring outlook can be obtained, extending for many miles along a great valley or across lake and prairie. Like the mounds in this park, nearly all the mounds of this state were used for burial, but very commonly for only a few bones of the chief or friend so honored and commemorated.

It was formerly thought by many archæologists, twenty-five to fifty years ago, that the mounds of the Ohio and Mississippi valleys were built by a prehistoric people, distinct from the Indians and further advanced in agriculture and the arts of civilization. To that ancient people the name of Mound Builders was given, and it was supposed that they were driven southward into Mexico by incursions of the Indian tribes that were found in our country at the first coming of white men. This view, however, has been generally given up. The researches of Powell and other specialists, including Winchell and Brower in Minnesota, have well referred the building of the mounds to the ancestors of the present Indians.

From the testimony of Captain Jonathan Carver, it seems to me wellnigh certain that some or all of the mounds on Dayton's bluff in St. Paul were built for sepulture by the Sioux. It was their custom to enwrap the body after death and to expose it in the open air on a scaffold of poles. Later, in many cases, the relatives kept some of the bones and carried them in their journeys, and Carver saw such bundles of bones brought there by the Sioux for interment. Although I think those mounds to have been built partly in his time, a hundred and forty years ago, the same mound groups may be in part much older. Indeed, it is very probable that the building of mounds and other earthworks was practiced by many Indian tribes, and from very remote times, perhaps ever since the recession of the ice-sheet from the upper Mississippi region.

Carver traveled in the summer and autumn of 1766 from Boston to the Minnesota river, and spent the following winter with the Sioux near the site of New Ulm. He arrived at the

site of St. Paul at the middle of November, and visited the cave later named for him in the base of Dayton's bluff, of which cave and its neighborhood he wrote:

> The Indians term it Wakon-teebe, that is, the Dwelling of the Great Spirit. * * * At a little distance from this dreary cavern is the burying-place of several bands of the Naudowessie [Sioux] Indians: though these people have no fixed residence, living in tents, and abiding but a few months on one spot, yet they always bring the bones of their dead to this place; which they take the opportunity of doing when the chiefs meet to hold their councils, and to settle all public affairs for the ensuing summer.

So long ago was the site of the Mounds Park, or some other burying-ground very near it, used by the Sioux bands coming habitually there once a year, with the opening of spring, to inter the bones of their dead, and on the same occasion to hold a legislative session. It is thus seen that St. Paul was even then the established seat of government, the capital, as we might say, of the adjoining Sioux country.

When Carver returned to the east the next spring, voyaging down the Minnesota and Mississippi rivers, he was accompanied to this locality of Carver's Cave and Mounds Park by nearly three hundred of the Sioux, including many of their chiefs.

Above the site of the cave and about a third of a mile south from it, at the crest of the river bluff, one of the finest groups of Indian mounds in Minnesota, now guarded and preserved in this city park of St. Paul for all coming time, tells of the vanished red people, once owners of this region, to their white successors. It is a place to pause from our busy toil, to think back to former centuries when a ruder race, children of the forest and the prairie, here hunted and fished, strove in wars, loved and hated, exulted, sorrowed, and passed away, leaving scarcely any traces of their existence save these earth mounds.

In the *American Antiquarian* for 1896, T. H. Lewis, of St. Paul, published two papers describing the Indian village sites and mound groups of the area of this city. With its high land terminating in steep or precipitous bluffs overlooking the Mississippi, this was a favorite place of the Indians for their temporary camping, or probably often for continuous residence dur-

ing many years, with absence, of course, for hunting and to gather berries and wild rice in their season. No less than ten sites of Indian villages, known by frequent stone implements and their fragments scattered in the soil, are found by Lewis within the city limits, six being near the east or north side of the river, two on Phalen creek, and two west of the river.

Four groups of mounds are reported on the east side of the river in this area, including 58 mounds, and two groups in West St. Paul, together having 31 mounds. Thus the total number of mounds which Lewis examined in former years and recorded here is 89; but the most of them have been since destroyed.

The two most numerous groups in the east edge of the city were on Dayton's bluff, which was named more than fifty years ago for Lyman Dayton, a pioneer. It rises perpendicularly as a rock bluff from near the river shore to a height of 200 to 240 feet. One of the groups, extending about a quarter of a mile on the verge of the northwestern and slightly lower part of the bluff, originally comprised thirty-two mounds, as Lewis states; but nine of them had been demolished before his survey in 1881, when he noted the largest mound of that group as 47 feet in diameter and five and a half feet high. Scarcely one now remains.

The more interesting southeastern group, situated in the Mounds Park, lies on the verge of the highest part of the bluff. It begins a third of a mile southeast from the site of the other group, and extends some fifty rods east-southeast. As mapped by Lewis, it originally had eighteen mounds. He writes as follows:

> This group formerly consisted of one round mound with an approach, one elliptical mound, and sixteen round mounds, the largest of which was eighteen feet in height. * * * In 1856, the late Dr. Edward D. Neill made an excavation in it, and at the depth of six feet found the fragmentary remains of a human skeleton and a few pieces of broken pottery.

Ten and eleven years later, in 1866 and 1867, other excavations were made in this highest mound and in others adjoining it by Alfred J. Hill and William H. Kelley, finding frag-

ments of human bones, a broken earthen pipe, decayed mussel shells, charcoal and ashes, a few fragments of pottery made of clay mixed with broken shell particles, and "a large number of sea-shell beads closely packed together," as if they had formed a bracelet.

After a further interval of twelve years, one of the large mounds of this group, 70 feet in diameter and 12 feet high, was partially excavated in June, 1879, by T. H. Lewis and William H. Gross. They found near the center of the mound, at the depth of seven feet, "a well preserved bone implement, which had been rudely sharpened at one end as if intended to be used as an awl or perforator." Thence downward a round stake extended about two feet, and at the depth of eleven and one-half feet five pieces of wood, about eight feet long and five to seven inches in diameter, were found lying parallel with each other, 14 to 17 inches apart, extending from north to south. In the next foot below these large horizontal poles were decayed human bones, a bed of charcoal and ashes one to two inches deep, and a stratum of clay five inches deep, packed very hard, which appeared to have been a hearth or fireplace. This was nearly at the original surface of the ground before the mound was built. The preservation of the wood shows that this large mound is not very old. It is the next southeast of the highest mound, near the center of the group.

In August, 1882, Lewis made excavations in twelve mounds of this group finding in all of them human bones, in most of them mussel shells, but only rarely a stone arrowhead, or sometimes several together, and under one mound, near the original land surface, a bed of charcoal and ashes two and a half inches deep.

The most notable discovery in these extensive excavations by Lewis was at the bottom of one of the northwestern mounds, about fifty feet in diameter and nine feet high, where, just below the natural surface, eight stone cists or box-like compartments, rudely rectangular, about one by two feet in areal dimensions and about seven inches deep, had been formed by setting flat pieces of limestone on edge and covering them with limestone slabs

and boulders from the glacial drift, making a heap of stones nine feet in diameter and nearly two feet high as a roof. Each of the eight underlying cists contained human bones, but none had a complete skeleton.

Besides the bones, seven of the cists contained mussel shells, from one to fourteen in each. One had also a single arrowhead, another had three arrowheads, and a third had nine. In the central cist, no mussel shell nor arrowhead was found; but it contained a perforated bear's tooth, a small piece of lead ore, and a small lump of red clay.

Seven mounds, from four to eighteen feet high, namely, Nos. 2, 3, 7 (built above the wooden poles), 9 (the highest), 10, 12 (having the stone cists), and 13, of the original eighteen mapped and numbered by Lewis, remain for inspection by visitors in Mounds Park. The other eleven mounds have been removed in grading the ground, or are not now clearly recognizable. The Pavilion stands on the site of the original mound numbered 16, at the northwestern end of the group.

Whether any of the mounds in St. Paul were built at so late a time as is here suggested, cannot be certainly affirmed nor denied; but we have positive testimony that at least one mound, near the celebrated Indian quarry of red Pipestone in southwestern Minnesota, belongs to a date nearly seventy years after Carver's expedition to this region. George Catlin, the skillful painter of Indian portraits, visited this quarry in 1836, and wrote as follows (*North American Indians,* vol. II, p. 170), concerning the occasion of building this mound, for the burial of a young Sioux brave who lost his life in attempting an athletic feat.

> The medicine (or leaping) rock is a part of the precipice which has become severed from the main part, standing about seven or eight feet from the wall, just equal in height, and about seven feet in diameter.
>
> It stands like an immense column of thirty-five feet high, and highly polished on its top and sides. It requires a daring effort to leap on to its top from the main wall, and back again, and many a heart has sighed for the honour of the feat without daring to make the attempt. Some few have tried with success, and left their arrows stand-

ing in its crevice, several of which are seen there at this time; others have leapt the chasm and fallen from the slippery surface on which they could not hold, and suffered instant death upon the craggy rocks below. Every young man in the nation is ambitious to perform this feat; and those who have successfully done it are allowed to boast of it all their lives. In the sketch already exhibited [plate 270, at page 164 of that volume], there will be seen a view of the "leaping rock;" and, in the middle of the picture, a mound, of a conical form, of ten feet height, which was erected over the body of a distinguished young man who was killed by making this daring effort, about two years before I was there, and whose sad fate was related to me by a Sioux chief, who was father of the young man, and was visiting the Red Pipe Stone Quarry, with thirty others of his tribe, when we were there and cried over the grave, as he related the story to Mr. Wood and myself, of his son's death.

In numerous instances, and at widely separated localities, mounds in this state have been found to contain articles made by white men, as noted, in the reports of the Geological Survey of Minnesota, by Prof. N. H. Winchell and the present writer.

One of these mounds, on the site of the city of Red Wing, was thought by the late Col. William Colvill to have been probably built as the burial place of the Sioux chief from whom the city received its name. When this mound was leveled, in grading a street, decaying bones were found in it, and also a Jefferson medal of the year 1801, which Colonel Colvill supposed to have been presented to Red Wing, the old chief, by Lieut. Z. M. Pike, on his return in 1806 from exploration of the upper Mississippi.

Mound burial, either of the body soon after death, or, more commonly, of some of the bones kept by relatives or other friends during weeks or months and brought for ceremonious burial at some stated season of the year, seems to have been a common custom of the Sioux; but the less frequent, and even very rare occurrence of artificial mounds in all the country permanently occupied by the Algonquian tribes, including the Ojibways of northern Minnesota, indicates that they very rarely or never built mounds as monuments of their dead.

Surveys and plats of nearly all the groups of mounds in this state, with collection of many relics from them, have been

made by T. H. Lewis, Alfred J. Hill, and Hon. J. V. Brower, the latter being so engaged several years for the Minnesota Historical Society. Since the death of Mr. Brower in 1905, his unfinished work has been continued for the Historical Society by Professor Winchell, chiefly in preparation of a full report on the Indian tribes and the archæology of Minnesota, with a large series of maps of the mounds.

A very valuable archæological collection of aboriginal implements, weapons and ornaments, made of stone, copper, bone, etc., gathered from nearly every state in the Union and from other countries of America and the Old World, has been presented to this Historical Society by Rev. Edward C. Mitchell, of St. Paul, and is exhibited in its museum in the new capitol. Other collections, gathered by Mr. Brower in Minnesota and the region west to the Rocky mountains and south to Kansas, representing largely both the mound builders and the present Indians, are also to be placed in this museum, after they shall have been classified by Professor Winchell in his work for the publication before noted.

TRIBES FORMERLY IN MINNESOTA.

The earliest records of explorations reaching to the area of this state, written by Radisson, who with his brother-in-law, Groseilliers, came here in two expeditions, first in 1655-56 and again in 1659-60, surpass the writings of most of the later explorers in the great amount of detailed information given concerning the Indians, with whom these first white men in Minnesota dealt, trading for their furs, roamed through the woods or prairies, canoed along the streams and lakes, and lived in wigwams and tepees. Radisson's pages of glowing and minute descriptions, recitals of addresses and parleys by the Indians and his brother and himself in the rude councils and festivals with the savages, and indeed the whole spirit and tone of his narrations, are redolent with the freshness and wildness of nature and of mankind in all this great western region as it was two and a half centuries ago. In reading his pages, the mind is transported backward

a quarter of a millenium. We see the wild red men in their hunting of game, on the "road of war," and in the stealthy ambuscade; the women in their work of the lodge and the cornfields; and the youth and children in their pastimes, or, when famine befell, in the pangs of hunger even to death, with many also of the braves and whoever was old or weakened by disease.

Gathering throughout these narrations, and from the subsequent works of Hennepin, Perrot, Carver, the Henrys, Mackenzie, Pike, Keating and Long, Beltrami, Schoolcraft, Catlin, Nicollet, and others, the varied threads of information of the Indians, and weaving them to present, as in a tapestry, the picture of savage life, the delineation of the Indian's character, his habits of thought and action, we can restore, in imagination, those bygone times when the aboriginal possessors of the country drained by the Hudson and the St. Lawrence, the Great Lakes, and the Mississippi, dwelt at peace in their several tribal areas, or often carried war and devastation against their neighbors and even to distances of hundred of leagues.

The two principal tribes of Minnesota, whose hunting grounds long included all this area, until ceded by treaties, were the Ojibways, ranging through our northern forest region and still living there on reservations, and the Sioux, originally inhabiting mainly the southern and western prairie portion of the state. Bands from four other tribes or Indian peoples have temporarily lived here, these being Hurons, Ottawas, Winnebagoes, and Crees.

All these tribes are made known, in their early relations to this area, by the narratives of Radisson. Therefore it will be most convenient to give accounts of them here in the order of their geographic position, as they were found in his two western expeditions.

To understand the wanderings of some of these western tribes, however, we must first notice the Iroquois, dwelling between the Hudson and Genesee rivers in the area of the state of New York, whose war parties were dreaded by all the surrounding tribes. From a remote common ancestry, the Iroquois, while

all continuing to speak the same language, had diverged into five tribes or nations, who had united in a league before the first coming of white men. This powerful confederation included, as Morgan estimates, at least 25,000 people at the period of their greatest prosperity and highest numbers, about the middle of the seventeenth century, when Groseilliers and Radisson made these expeditions.

In 1649-50 the Iroquois had conquered the Hurons, and within two years later the Ottawas; and in 1654 they nearly exterminated the Eries, acquiring undisputed possession of all the country about Lake Erie. During seventy-five years, from 1625 to 1700, their raids of conquest and subjugation covered a wide region from New England to the Mississippi.

The Jesuit fathers, Radisson, and all writers on the history of this period, abound in testimony of the fear with which the other Indians and the French regarded these foes. The journeys of the fur traders and missionaries to and from the far west were practicable only by way of the Ottawa, Mattawa, and French rivers; for the route through lakes Ontario and Erie was debarred by the Iroquois. To undertake safely the trip down the Ottawa, with a year's collection of furs, required a very large escorting company of Indians, so formidable that the usual ranging parties of the Iroquois would not dare to attack them. Several hundred Indians from the tribes of the upper Mississippi and lakes Michigan and Superior made this trip with Groseilliers and Radisson on their return from both their western expeditions. Ten years afterwards, in 1670, more than nine hundred Indians accompanied Perrot and four other Frenchmen when they returned from the west to Montreal.

The Five Nations of the Iroquois in Radisson's time were the Senecas, Cayugas, Onondagas, Oneidas, and Mohawks. In 1715 they admitted the Tuscaroras into their league, a tribe of the same stock as shown by their language, who had lived before in North Carolina; and thenceforth they were commonly called the Six Nations. At the present day their descendants in northern and western New York, mostly living on reservations, number about 5,300, and in the provinces of Quebec and Ontario,

Canada, about 8,000; while nearly 2,000 Oneidas live on a reservation in Wisconsin, whither the greater part of that tribe removed in 1846.

They called themselves the Ho-de-no-sau-nee, or People of the Long House, meaning the long tract of country from the Hudson and Mohawk rivers past the Finger Lakes of central New York to the Genesee and Niagara, which was their home. Thus they indicated the close relationship of the Iroquois League, under which, as their thought is expressed by Morgan, their several nations "constituted one Family, dwelling together in one Long House."

HURONS.

According to the Jesuit Relations of 1655-56, the principal bands of the Hurons, living in seventeen villages within an area of no greater extent than about fifty miles, had formerly numbered fully 30,000 people. From that home country southeast of Georgian bay, where they had depended largely on agriculture, especially the raising of corn, being mostly neither expert hunters nor practiced warriors, the survivors from the Iroquois attacks fled to Bois Blanc island and Mackinac, and to the region of Green bay and the Fox river.

TheTobacco nation, a more western band of this people, who had been so named for their diversified agriculture, notably including the plentiful cultivation of tobacco, went onward to the friendly Illinois tribe on the Illinois and Mississippi rivers. Hence, in company with some of the similarly exiled Ottawas, who had lived farther northwest, on Lake Huron, they sought a permanent refuge and settlement in the region of the Upper Iowa river, nearly on the south line of the present state of Minnesota. Disappointed in finding no forests there, they advanced farther up the Mississippi, to Prairie island, ten miles long, on the Minnesota side of the main channel of the great river between Lake Pepin and the mouth of the St. Croix, in the midst of a beautiful country of forests and prairies, which they chose for their new home.

But in an evil day hostilities were begun by these Hurons against the Sioux, whom they thought to be at a disadvantage from their not having firearms. The greater numbers and superior prowess of the Sioux enabled them soon to harass the Hurons and Ottawas so that they again relinquished their homes and fled into the forest of northwestern Wisconsin, on the neutral ground between the Ojibways, Menominees, and other tribes on the east, and the warlike Sioux on the west.

Nicolas Perrot, who came in 1683 to the Mississippi, by way of the Wisconsin river, and was engaged in trade with the Indians thence northward to Lake Pepin during several years, until 1689 or later, is the authority for the temporary settlement of the Hurons and Ottawas on Isle Pelée, now Prairie island, where Groseilliers and Radisson spent more than a year with them. He wrote a treatise entitled, in translation from the French, "Memoir on the Manners, Customs, and Religion of the Savages of North America." This was preserved in manuscript until 1864, when it was published by the Jesuit father, J. Tailhan, with important editorial notes and a very elaborate index.

Perrot had trading posts on Lake Pepin and the Mississippi river farther south, exerted a great influence over the Indians of Wisconsin, eastern Iowa, and southeastern Minnesota, and derived from them, and from the Indians and French of Chequamegon bay, the account of the wanderings of the Ottawas and Hurons, with their stay of a few years on Prairie island. It is given by his Memoir in its chapter XV, entitled, as translated, "Flight of the Hurons and Ottawas to the Mississippi." This statement is very important in its confirmation of the view to be set forth in the next chapter of the present volume, that Radisson's "first landing isle" was no other than Prairie island; and therefore it seems desirable to give a close translation of it, which I have made as follows:

When all the Ottawas were scattered toward the lakes, the Saulteurs [Ojibways] and Missisakis [who had lived on the north shore of Lake Huron] fled to the north, and then to Kionconan [Keweenaw], for the sake of hunting; and the Ottawas, fearing that they would not be sufficiently strong to resist the incursions of the Iroquois, who would be informed of the place where they had made their settle-

ment, fled for refuge to the Mississippi river, which is called at the present time the Louisianne. They ascended this river to the distance of a dozen leagues or thereabout from the Wisconsin river, where they found another river which is called the river of the Iowas [the Upper Iowa, heading in the southeastern part of Mower county, Minnesota]. They followed it to its source, and there encountered tribes who received them kindly. But in all the extent of country which they passed through having seen no place suitable for their settlement, by reason that there was no timber at all, and that it showed only prairies and smooth plains, though buffaloes and other animals were in abundance, they resumed their same route to return upon their steps; and after having once more reached the Louisianne, they went higher up.

They were not long there without separating to go to one side and the other for hunting: I speak of one party only of their people, whom the Sioux encountered, took, and brought to their villages. The Sioux, who had not any acquaintance with firearms and other instruments which they saw in their possession, themselves using only knives of stone, as of a millstone, and axes of chert cobbles, hoped that these new tribes who had approached them would share with them the commodities which they had; and, believing that they were supernatural, because they had the use of this fire which had no resemblance with all that they had, like the stones and other things, just as I have said, they brought them to their villages, and afterward restored them to their own people.

The Ottawas and Hurons received them very well in their turn, without however giving them large presents. The Sioux came back to their people, with some little things which they had received from the Ottawas, distributed a part to the other villages of their allies, and gave hatchets to some and a few knives or awls to others. All these villages sent deputies to the Ottawas, where, as soon as they had arrived, they commenced, following their custom, to shed tears upon all whom they met, for indicating to them the unrestrained joy that they had in having found them, and to implore them to have pity upon them, by sharing with them this iron which they regarded as a divinity.

The Ottawas, seeing these people weep on all who presented themselves before them, considered it in scorn, and regarded them as people much inferior to themselves, incapable even of making war. They gave to them also a trifle, be it knives or awls, which the Sioux showed that they esteemed very much, raising their eyes to heaven and blessing it for having conducted these tribes into their country, who would be able to procure for them so powerful means to make an end of their poverty. The Ottawas, who had some fowling-pieces, fired them, and the noise that they made frightened them so much that they imagined that it was the lightning or the thunder, of which they were masters to exterminate whomsoever they would.

The Sioux made a thousand expressions of affection to the Hurons and Ottawas everywhere they were, manifesting to them all subservience possible, to the end of moving them to compassion, and deriving from it some benefit; but the Ottawas had for them so much less of esteem, as they persisted in placing themselves before them in these attitudes of humiliation. The Ottawas decided finally to choose the island named Pelee for their settlement, where they were some years in peace. They there received often the visits of the Sioux. But a day arrived when the Hurons, being on the hunt, encountered some Sioux whom they killed. The Sioux, in sorrow for their comrades, did not know what had become of them; they found some days afterward the dead bodies from which they had cut off the head. They returned to their village hastily to bring this sad news, and encountered some Hurons on the road, whom they took as prisoners. When they had arrived among their people, the chiefs released them and sent them back to their tribe. The Hurons, having so much audacity as to imagine that the Sioux were incapable of resisting them without weapons of iron and firearms, conspired with the Ottawas to attack them and make war upon them, in order to drive them from their country, and for themselves to be able to extend farther the range of their hunting. The Ottawas and Hurons joined themselves together and marched against the Sioux. They believed that as soon as they appeared, they would flee; but they were much deceived, for they resisted their attacks and even repelled them, and if they had not retreated, they would have been entirely defeated by the great number of the horde who came from other villages of their allies for their help. They pursued them even to their settlement, where they were constrained to make a poor fort, which did not permit them to be capable to make the Sioux turn back, even though they did not dare to attack it.

The continual raids which the Sioux made upon them obliged them to flee. They had acquaintance with a river which we call the Black river; they entered it, and, having arrived where it takes its source, the Hurons there found a place suitable for fortifying themselves and establishing their village. The Ottawas pushed farther, and marched to Lake Superior, and fixed their abode at Chequamegon. The Sioux, seeing their enemies departed, dwelt in peace without pursuing them farther; but the Hurons were not content to stop there; they formed some expeditions against them, which produced little effect, drew upon themselves on the part of the Sioux frequent raids, and obliged them to quit their fort for going to join the Ottawas at Chequamegon, with a great loss of their people.

The narration continues with warfare carried on by the Hurons, in the region of Chequamegon bay, against the Sioux of the country west and south. In 1670-71 these refugees, fear-

ing a Sioux attack and massacre, abandoned their settlements on that bay, going again to live on the Manitoulin and Mackinac islands, in and adjoining the north part of Lake Huron, whence, about eighteen years before, in 1652-53, this large part of the exiled Ottawa and Huron tribes had started on their travels to the Illinois, Mississippi, and Upper Iowa rivers, to Prairie island in Minnesota, and afterward to northern Wisconsin and Chequamegon bay.

To my mind Perrot's narration is a complete proof that these refugees spent a few years on Prairie island, where Groseilliers and Radisson visited them in 1655-56, if I rightly identify the route of that expedition. Three years later, in 1659, the Hurons were found on the lakes at the sources of the Chippewa river, while the Ottawas had come to Chequamegon bay, or at least were there the next spring.

It is clearly known that the Hurons and Ottawas occupied Prairie island only four or five years, coming in 1653 or 1654, and departing probably in 1658, or perhaps a year earlier. Radisson says that in 1655 they had newly come to Prairie island. Before the summer of 1659 the Hurons had temporarily located at a lake in northern Wisconsin, thought to be Lac Courte Oreille, whence some of them, with Ojibways, went during that summer to Montreal and Three Rivers, afterward returning in the company of Groseilliers and Radisson. Besides, in harmony with Perrot's statement that the Ottawas came earliest to Lake Superior, we learn from Radisson that in 1659-60 they were apparently just establishing themselves at Chequamegon bay; for, according to his narration, in the spring of 1660 they built a fort on the long beach which incloses this bay at the northeast, now called Oak point.

In lineage and language the Hurons were of the extensive Iroquoian stock. The name Huron, from a French word, *hure* (a head, as of a wild boar), was given to them by the French, in allusion to the ridged and bristling arrangement of their hair. Their descendants, known after their aboriginal name as Wyandots, now number some 700, about half being in the Indian Territory, and half in Canada.

An interesting sketch of the Tionontates, or Tobacco nation, from 1616, when they were first visited by the French, to the period of the Revolutionary War, was given by Shea in the *Historical Magazine* (vol. V. pp. 262-269, Sept., 1861). This branch of the Huron tribe, whose remnant, probably with other fugitive Hurons, we have traced in their wandering to Prairie island and Chequamegon bay, originally lived, according to Parkman, in the valleys of the Blue mountains, at the south extremity of Georgian bay. Their country, including nine villages in 1640, was two days' journey west from the frontier villages of the main body of the Hurons, among whom the Jesuits had very successful missions until the Iroquois devastated all that region.

OTTAWAS.

Franquelin, on his map of North America drafted in 1688, placed the Nations of Ottawas [Outaouacs] in Wisconsin and northeastern Minnesota, indicating, erroneously, that it was a collective name for the native tribes of this region. It was often so used by the Jesuits and other early French writers, but not by the Indians. The Huron name for the Ottawas was Ondatahouats, signifying "the people of the forest;" and this name became shortened to Ottawas. The French nicknamed them as the *Cheveux relevez* (having crested hair), whence Radisson called them "the nation of the stairing haires." He also gave this name to Lake Huron, where they dwelt, limiting his "lake of the hurrons" to Georgian bay.

From their former homes, on and near Lake Huron and on its islands, the Ottawas had been dispersed westward, about the years 1650-52, by the incursions of the Iroquois. A part of the tribe fled, with the Tobacco band of Hurons, to the Mississippi, lived a few years with them on Prairie island and in its vicinity, and then passed north to Chequamegon bay. The escort of Groseilliers and Radisson on their return from Prairie island to Quebec included Ottawa Indians; and Radisson also particularly mentions the Sinagoes, one of the four principal

bands of the Ottawas, as a part of the same escort. The Ottawa river received its name from its being the route by which these Indians came yearly from Lake Huron to trade with the French on the lower St. Lawrence.

In 1670-71 the Ottawas, being driven from Chequamegon bay by attacks of the Sioux, returned to the Grand Manitoulin island, one of their ancient places of abode, in the north part of Lake Huron, where the Jesuits established among them a flourishing mission. They belong to the great Algonquian stock, and their language is closely allied with the Ojibway. About 3,000 of their descendants live in Michigan, in the region of Mackinac, on Grand Traverse and Little Traverse bays, etc.; about 900 are on Manitoulin and Cockburn islands, Lake Huron; and a few, about 160, are on a reservation in the Indian Territory.

A party of Ottawas, coming to the Hurons during the famine experienced in eastern Minnesota in the winter of 1659-60, as narrated by Radisson, obtained by bartering with the Hurons a share of their very scanty food supplies, intensifying the severity of the general starvation. Again, on Chequamegon bay, Ottawas exacted a large recompense from Groseilliers and Radisson for aiding them when the latter was chilled and exhausted in dragging their sleds, laden with merchandise and furs, across the melting ice of the bay. Remembering their conduct on these occasions, Radisson ranked them as the lowest among "four score nations" of the Indians whom he had known.

WINNEBAGOES.

Green bay was known to the French in Radisson's time as the Bay of the Puants, or Winnebagoes; and their name is now borne by the large Winnebago lake on the old canoe route from Green bay by the Fox river to the Wisconsin and the Mississippi. They were there visited by Jean Nicolet in the winter of 1634-35, and by Groseilliers and Radisson in the winter of 1654-55. From the Winnebago country our two first French traders of Minnesota, with a hundred and fifty Indians, tramped on snowshoes in the early spring of 1655 to the Mississippi,

and thence ascended this river to visit the Huron and Ottawa settlement on Prairie island.

The Winnebagoes were an outlying tribe of the Siouan stock, mainly surrounded by Algonquian tribes. Their name, meaning the People of the Stinking Water, that is, of the sea, was adopted by the French from its use among the Algonquins, just as the name Sioux was received from the Ojibway and other Algonquian languages. The populous and powerful Winnebagoes continued in possession of the same area during two centuries after they first became known to history. In 1832 they ceded their country south and east of the Fox and Wisconsin rivers to the United States, and afterward many of the tribe were removed to northeastern Iowa. Thence, in 1848, they were removed to Long Prairie, in the central part of the present state of Minnesota; and in 1855 they were again removed, to a reservation in Blue Earth county of this state. In 1863, after the Sioux outbreak, they were removed to a reservation in Dakota; and in 1866 to a more suitable reservation in Nebraska, where this part of the Winnebago tribe now numbers about 1,100. A large number, stated by Grinnell as about 1,450, still live in Wisconsin.

OJIBWAYS.

By the early French voyageurs and writers the Ojibways were commonly called Saulteurs, from their once living in large numbers about the Sault Ste. Marie. Their area, however, also comprised a great part of the shores of lakes Huron and Superior, with the adjoining country to variable distances inland. During the eighteenth century they much extended their range southwestward, driving the Sioux from the wooded part of Minnesota, and also spreading across the Red river valley to the Turtle mountain on the boundary between North Dakota and Manitoba. In English their name appears, in a corrupted form, as Chippewas.

It is asserted by Warren, the historian of the Ojibway nation, that this name means, "To roast till puckered up," refer-

ring to the torture of prisoners taken in war. This seems to me a more probable origin than any of the several others that have been advocated, as the puckering or plaiting of the moccasin; a puckering of the lips in speaking or drinking; the drawling pronunciation of words, which is said by Belcourt to characterize these people; or the contraction of the lakes toward the strait of Mackinac, once their refuge from the Iroquois, or toward St. Mary's river and falls, as was suggested by Governor Ramsey.

When Groseilliers and Radisson came to the Sault Ste. Marie, in 1659, the country was deserted, the Ojibways formerly there having fled westward before the fury of Iroquois rangers. Among the characteristics of the Ojibways which we discern in Radisson's writings is an aptitude for commercial enterprises, as they came yearly with their furs to Montreal and Quebec; and in the spring of 1660 Ojibway traders, after trafficking among the Sioux of the Prairies, returned with these Frenchmen to Chequamegon bay.

About 9,000 Ojibways are now living in northern Minnesota; about 2,200 in the vicinity of Devil's lake and Turtle mountain, North Dakota; 3,000 in Wisconsin; and probably 4,000 in Michigan. Their population in the United States is thus about 18,000. Nearly as many other Ojibways live in the Canadian province of Ontario, north of lakes Huron and Superior, and farther northwest in Manitoba; so that their entire numbers are about 35,000. They are the largest tribe or division of the very widely spread Algonquian stock.

Both in Canada and the United States the Ojibways have generally manifested a disposition for peace with the white settlers. But in the early history of Minnesota, and during a hundred years before this territory was organized, they were almost continually hostile to the Sioux or Dakotas, with frequent raids, conflicts between small war parties, and ambuscades and murders by each of these wily hereditary foes.

William W. Warren, whose mother was an Ojibway, prepared, in 1851-53, an extended and very valuable *History of the Ojibway Nation,* chiefly relating to its part in Minnesota

and Wisconsin, which was published in 1885 as Volume V of the Minnesota Historical Society Collections. In Volume IX of the same series, published in 1901, Rev. Joseph A. Gilfillan, who during more than twenty years was a very devoted missionary among the Ojibways in the White Earth reservation and other large parts of northern Minnesota, contributed a paper of seventy-four pages, vividly portraying the habits and mode of life of this people, their customs and usages in intercourse with each other and with the white people, their diverse types of physical and mental development and characteristics, and much of their recent history.

Conflicts which were waged long and fiercely between the Ojibways and the Sioux for the possession of northeastern Minnesota, and the results of extended researches concerning the artificial mounds and primitive men of this region, were set forth by the late Hon. J. V. Brower in three admirable monographs, *Mille Lac,* published in 1900; *Kathio,* in 1901; and *Kakabikansing,* in 1902.

SIOUX.

The aboriginal tribes and bands who were called by Radisson the Nadoneceronons (more commonly by other writers the Nadouesioux) or Nation of the Beef, that is, the Buffalo, once inhabited nearly all of the present state of Minnesota, and also a large extent of the great prairie region farther south and west, in Iowa, Nebraska, and the Dakotas. The Sioux and Assiniboines were first brought to the knowledge of Europeans in the Jesuit Relation of 1640, being reported to the writer, by Jean Nicolet, as living in the neighborhood of the Winnebagoes. In the Relation of 1642, information from Fathers Raymbault and Jogues defined their country as nine days' journey beyond the west end of Lake Superior.

Groseilliers and Radisson were the first white men to visit the Sioux. They laid the foundation for fur trading, and counseled peace with the Crees and other tribes, against whom the Sioux, "the Iroquois of the West," had frequent wars. After

the great "feast of the dead," when they thus sought to reconcile the Sioux and Crees, the French traders went to see the Sioux of the Buffalo Prairies in their own country.

The locality of the feast and council with the Sioux, and with the Crees who were later invited, I have identified as somewhere on or near Knife river and lake in Kanabec county, Minnesota. These Frenchmen probably did not go to the very extensive settlement of the Sioux in the neighborhood of the mouth of Mille Lacs, only one or two days' journey westward from their Sioux and Cree feast. It is unfortunate that the name of that "great village of the Nadouesioux, called Izatys, where never had a Frenchman been," as stated by Du Luth, previous to his own visit there on July 2, 1679, was misread by Brodhead in the original manuscript of Du Luth's letter or memoir as "Kathio," transcribing *Iz* of *Izatys* as "K," and *ys* as "hio" (Documents relating to the Colonial History of the State of New York, Volume IX, published in 1855, page 795). Brodhead undoubtedly had before him the same manuscript that was used by Shea for his translation in 1880 (Hennepin's Discovery of Louisiana, Appendix, page 375), and by Margry for his French publication in 1886 (Margry Papers, Volume VI, page 22). Neill, Winchell, Hill, Brower, Coues, and the present writer, have been misled into using the name Kathio by Brodhead's error. It has been so much used, indeed, that it may be retained as a synonym of Izatys.

The name Sioux is the terminal part of Nadouessis or Nadouesioux, a term of hatred, meaning snakes, enemies, which was applied by the Ojibways and other Algonquins to this people, and sometimes also to the Iroquois. Under this long Algonquian name they were commonly designated by the Jesuit Relations, by Du Luth and Hennepin, by La Salle in 1682 on the lower Mississippi and Perrot in 1689 at Fort St. Antoine on Lake Pepin, when they each took formal possession of this region for France, and by other early writings and maps. Soon afterward, however, in Perrot's Memoir, and in the journals of Le Sueur and Penicaut, it had been shortened to its present form; but, much later, Carver again used the old unabbreviated name,

probably because of acquaintance with the writings of Hennepin. The Sioux tribes dislike this alien name, and call themselves, collectively, Dakotas, that is, allies or confederates.

In the narration of his pretended journey to the Gulf of Mexico, Radisson stated that the "people that dwelleth about the salt water * * * are called Tatarga, that is to say, buff," meaning the buffalo, the Sioux or Dakota name of the buffalo being *tatanka*. He added that they went to war yearly against the Sioux and the Crees, showing that he supposed the Tatarga tc be a distinct tribe or people. Again, in the account of his fictitious year in the second western expedition, describing the Crees in the region of Hudson bay, Radisson referred to their having "a stone of Turquois from the nation of the buff and beefe, with whome they had warrs." At the end of the narration of this expedition, Radisson gave a list of the names of thirty-one Indian nations or tribes in the South, and another list of forty-one nations in the North, noting in each case that many of these tribes had been destroyed by the Iroquois. The four names ending the latter list are Christinos (Crees), Nadouceronons (Sioux), Quinipigousek (Winnebagoes), and Tatanga, the last being certainly intended to be identical with the Tatarga before mentioned. Radisson says in the brief comment following the list of the South: "All these Nations are sedentaries, and live upon corn and other grains, by hunting and fishing, which is plentiful, and by the ragouts of roots;" and concerning the tribes of the North: "The two last [Winnebagoes and Tatanga] are sedentary and doe reap, and all the rest are wandering people, that live by their hunting and Fishing, and some few of Rice that they doe labour for."

With little knowledge of the people named Tatanga, Radisson appears to have thus referred to one of the large divisions of the mainly nomadic Sioux of the western prairies and plains, the same which Le Sueur, writing about forty years later, called the Tintangaoughiatons, translating it as the Village of the Great Cabin or Tepee. This identification was first suggested by J. V. Brower and Alfred J. Hill in the seventh volume of the Minnesota Historical Society Collections. The translation is

more properly rendered by Hennepin, as "the Nation of the prairies, who are called Tintonha," from the Sioux word *tintah,* a prairie. They are the present Tintonwans, Titonwans, or Tetons, comprising many bands of Sioux who ranged over southern and western Minnesota and onward to the vast country of plains west of the Missouri river.

Some bands of this people of the buffalo prairies, imperfectly known to Radisson as the Tatarga or Tatanga, lived not far westward of Prairie island, and by their later hostility compelled the Huron and Ottawa refugees to forsake their temporary home there, fleeing into northern Wisconsin. These prairie Indians, not recognized by the Frenchmen to be the same with the Nadouesioux, as they were called by the Ojibways, were almost surely represented, under the name "ticacon," in the motley retinue, from many tribes, who went with Groseilliers and Radisson from Prairie island to Montreal and Quebec.

The Tetons now number about 16,000; all the other Sioux or Dakotas in the United States number about 11,000; and their small bands in Canada, about 850. The entire Sioux people are thus approximately 28,000. In the times of Radisson and Hennepin they had probably somewhat greater numbers. The former was told that they had seven thousand men, that is, warriors; and the later wrote: "These Indians number eight or nine thousand warriors, very brave, great runners, and very good bowmen."

About 15,000 other Indians belong to the Siouan stock or family, which, besides the Sioux proper or Dakotas, includes also the Assiniboines or Stone Sioux, a tribe that seceded from the Sioux a few centuries ago, now numbering about 3,000; the Omahas, nearly 1,200; the Poncas, about 800; the Osages, nearly 1,800; the Winnebagoes, about 2,500, as before noted; the Crows some 2,000; and small remnants of the Kansas or Kaws, Iowas, Mandans, and several other tribes.

Near the Atlantic coast, numerous other Siouan tribes, some of whom were powerful, lived in Virginia and North and South Carolina, as made known by the researches of Hale, Gatschet, and Mooney; but they have dwindled until now only a few

score of their people remain. From that eastern country the Sioux of the upper Mississippi and Missouri rivers probably came by migration along the Ohio, passing mostly to the west of the Mississippi several centuries before the discovery of America.

After the conquest of the Mille Lacs region by the Ojibways, estimated by Brower to have taken place about 1750 or a few years earlier, the Mdewakantonwan Sioux, that is, those of Spirit lake, named Mille Lacs by the French, retreated to the south and established themselves on the Mississippi. Previously, in the year 1700, the vicinity of the Mississippi along the southeast border of the area of Minnesota was a neutral and mostly uninhabited country, called by the Indians a "road of war," as Le Sueur wrote, "between the Scioux and Outagamis [Foxes], because the latter, who dwell on the east side of the Mississippi, pass this road continually when going to war against the Scioux." Carver, ascending the Mississippi in 1766, found villages of Sioux, called the river bands, who had probably come from Mille Lacs since 1750, then living "near the river St. Croix," and his map shows them somewhat above that stream, in the neighborhood of St. Paul.

During the next forty years they extended much farther south. In 1805, Pike found the Minowa Kantong, as he wrote for Mdewakantonwans, beginning near Prairie du Chien and reaching along the course of the Mississippi to the mouth of the Minnesota, and also thirty-five miles up the latter river. These were the same as the Izatys of Du Luth, the Issati or Isanti tribe of Hennepin, who in 1680 and later lived in the region of Mille Lacs and the Rum river. They were apparently the largest tribe among the seven enumerated by Le Sueur as the Sioux of the East. Their descendants, now called Santees, number nearly 1,300, of whom about 1,000 are on the Santee reservation in Nebraska, and the others at Flandreau, South Dakota.

Leavenworth, in 1821, in giving his written testimony concerning the Carver land grant, said that the Sioux of the Plains never owned land on the east side of the Mississippi; but already the former Sioux of Mille Lacs, having spread along this river far southward, deserved, as he thought, their distinctive

designation as the Sioux of the River. They had become so fully possessors of the adjoining southwestern border of Wisconsin, formerly owned by the Outagami or Fox tribe, that they exacted and received tribute for timber cut and rafted by Frenchmen from the Chippewa river.

Directly after the Sioux outbreak of 1862, nearly all of these Indians who had lived in Minnesota, belonging in numerous bands, fled or were removed to Dakota. Less than 200 full-blood Sioux remain in this state, and about 700 of mixed blood, mostly near Morton and Shakopee on the Minnesota river, in and near Mendota, at its mouth, and on Prairie island.

Rev. Stephen R. Riggs, aided by other missionaries among the Sioux prepared a very useful *Grammar and Dictionary of the Dakota Language,* which was published in 1852 by the Smithsonian Institution, under the patronage of the Minnesota Historical Society, being the fourth volume (338 pages) of the Smithsonian Contributions to Knowledge. The part of this work comprising the Dakota-English Dictionary, much enlarged, was republished in 1890, as Volume VII (665 pages) of the U. S. Geographical and Geological Survey of the Rocky Mountain Region.

In the South Dakota Historical Society Collections, the secretary of that society, Doane Robinson, published in 1904, as Part II of its volume II, *A History of the Dakota or Sioux Indians,* 523 pages, treating briefly of their early history and quite fully of the last sixty years.

Among the many other sources of information concerning this people, the reader should peruse the following narrations of missionary work in Minnesota: *Mary and I, Forty years with the Sioux,* by Rev. Stephen R. Riggs, 388 pages, 1880; *Two Volunteer Missionaries among the Dakotas, or the Story of the Labors of Samuel W. and Gideon H. Pond,* by S. W. Pond, Jr., 278 pages, 1893; *Lights and Shadows of a Long Episcopate,* by Bishop Whipple, 576 pages, 1900.

An extensive manuscript of Rev. Samuel W. Pond, describing the character and customs of the Dakotas or Sioux as they were in 1834, when he came here as a missionary, has been pre-

sented to the Minnesota Historical Society and is to be published in the next Volume XII of its Collections. This treats of the Sioux in nearly the same manner, from long personal acquaintance with them, as the Ojibways are described by Rev. J. A. Gilfillan in the paper before noted.

CREES.

North of the Sioux country and adjoining it, a vast forest area was occupied by the Crees, who, after the Ojibways, are the next largest tribe of the great Algonquian stock. Their name, spelled Christinos by Radisson, appears under a dozen forms, or more, in the Jesuit Relations and other works, as Christinaux, Kilistinons, Kinistinons, etc. Rev. George A. Belcourt, long a missionary on the Red, Assiniboine, and Saskatchewan rivers, stated that the Crees call themselves Kinishtinak, that is, held by the winds, referring to their dwelling on large lakes where in windy weather they could not travel with their little canoes. In Radisson's time, the Cree canoes, as described by him, were so small that they could carry only one or two persons, being the smallest seen by him among all the Indian tribes. Their country then extended into northern Minnesota, to the northwest shore and west end of Lake Superior; east to Lake Nipigon and James bay; far northward along the southwest side of Hudson bay; and west to Lake Winnipeg and the Saskatchewan. Franquelin's map, in 1688, called Lake Winnipeg the Lake of the Crees, and Lake Manitoba the Lake of the Assiniboines.

Awatanik, a roving Indian whose narration of his travel in 1659 along the shore of Hudson bay is contained in the Jesuit Relation of 1659-60, told of the Crees there as follows: "He noticed especially the Kilistinons, who are divided among nine different residences, some of a thousand, others of fifteen hundred men; they are settled in large villages, where they leave their wives and children while they chase the Moose and hunt the Beaver."

Dablon, in the Jesuit Relation of 1670-71, wrote: "Finally, the Kilistinons are dispersed through the whole Region to

the North of this Lake Superior,—possessing neither corn, nor fields, nor any fixed abode; but forever wandering through those vast Forests, and seeking a livelihood there by hunting."

Within the next hundred years after the western expeditions of Groseilliers and Radisson, the Crees mostly withdrew from Minnesota and Lake Superior, yielding to the encroaching Ojibways. At the present time their geographic area reaches from James and Hudson bays west to lakes Winnipeg and Manitoba, northwest almost to Athabasca lake and river, and through Saskatchewan and Alberta to the Rocky Mountains. In their western extension they were separated from the country of the Sioux proper by that of the Assiniboines, who, beginning at the Lake of the Woods and the Red river of the North, ranged over the prairies and plains of southern Manitoba, Assiniboia, and northern Montana. The Crees now number about 15,000, all living in Canada, and are the largest of the Canadian Indian tribes.

Traversing the eastern part of their country, which for journeys afoot is possible only in winter, one passes through forests alternating with small and large tracts of peat swamps, called muskegs, treeless, or bearing a few tamaracks, and often inclosing a pond or lake. Hence the Crees in that region are commonly named the Swampy Crees. Northwestward, where the timber is more continuous, they are called Wood Crees; and those who roam over the shrubby and grassy expanses of Alberta are the Plain Crees. But through all their great areal extent, they differ only very slightly in tribal character or in their language, which is nearly related to the Ojibway and other Algonquian languages. It is also to be noted that generally or always they have maintained peace with their Algonquian neighbors, and also with the Assiniboines, who, when seceding from the Sioux, placed themselves under the protection of the Crees.

Eleven years after the council held with the Sioux and Crees by Groseilliers and Radisson, the earliest pioneers of the fur trade is Minnesota, St. Lusson, with Perrot as his interpreter, summoned to the Sault Ste. Marie delegations from many nations or tribes of the upper Great Lakes and of the country farther

north and west. They came, at the time appointed, from fourteen tribes, including the Crees and Assiniboines. On June 14, 1671, aided by Father Allouez, Perrot, and about twenty others of the French, St. Lusson, as a representative for Louis XIV, secured the assent of these Indians to his taking possession of their country, formally and with imposing ceremony, for France, promising in return to protect the Indians against any invading enemies. This treaty, if it may be so called, aimed to ally the native tribes with the French in opposition to the English, who were then establishing their trade on Hudson bay.

More like the work of Groseilliers and Radisson, for cultivating peace among the Indian tribes and alliance with France, were the efforts of Du Luth eight years after the convocation at Sault Ste. Marie. His report reads as follows, translated by Shea, with slight changes in proper names to accord with the original French text published in the Margry Papers.

> On the 2d of July, 1679, I had the honor to plant his majesty's arms in the great village of the Nadouesioux, called Izatys, where never had a Frenchman been, no more than at the Songastikons and Houetbatons, distant six score leagues from the former, where I also planted his majesty's arms, in the same year 1679.
>
> On the 15th of September, having given the Assenipoualaks [Assiniboines] as well as all the other northern nations a rendezvous at the extremity of Lake Superior to induce them to make peace with the Nadouesioux, their common enemy, they were all there, and I was happy enough to gain their esteem and friendship, and in order that the peace might be lasting among them, I thought that I could not cement it better than by inducing the nations to make reciprocal marriages with each other, which I could not effect without great expense. The following winter I made them hold meetings in the woods, which I attended, in order that they might hunt together, give banquets, and, by this means, contract a closer friendship.

Between the second western expedition narrated by Radisson and this tour into Minnesota by Du Luth, we have no records of white men in this state. Separated by nearly twenty years, these forerunners of commerce and civilization earnestly sought, in the same regions and by similar methods of persuasion, to win the Indian tribes, Ojibways, Sioux, Assiniboines, Crees, and others, to live in peace and to traffic with the French. A

few years later came Perrot and Le Sueur, establishing trading posts on the Mississippi and on Lake Superior, in the locations thought to be best for securing and maintaining intertribal peace, especially between the Ojibways and Sioux.

AGRICULTURE OF THE INDIANS.

In addition to the food supplies obtained by hunting and fishing, wild fruits, berries, and nuts, edible roots, and wild rice, the Indians of our region relied in a great degree on their cultivation of food plants. We may therefore well extend our view beyond the state limits, to consider briefly the attainments of the American or red race in agriculture, the oldest of the industrial arts that lead from savagery toward civilization.

Among the several notable additions to the world's important food resources which were received by the discovery of this western continent, including potatoes, tomatoes, the most common species and varieties of beans, the pumpkin and squashes, the pine-apple, and the domesticated turkey, no other ranks so high in value as maize or Indian corn, which was cultivated in abundance by all the tribes of the eastern and southern United States, from the Atlantic to the upper Mississippi, and quite across the continent to California, as also farther south in Mexico and Central America, and onward to Peru, Chile, and the River La Plata.

Schoolcraft wrote of this grain: "The Zea, maize, originally furnished the principal article of subsistence among all the tribes of this race, north and south. It lay at the foundation of the Mexican and Peruvian types of civilization, as well as the incipient gleamings of it among the more warlike tribes of the Iroquois, Natchez, Lenapees, and others, of northern latitudes. They esteem it so important and divine a grain, that their story-tellers invented various tales, in which this idea is symbolized under the form of a special gift from the Great Spirit. The Ojibway-Algonquins, who call it Mon-da-min, that is, the Spirit's grain or berry, have a pretty story of this kind, in which the stalk in full tassel is represented as descending from

the sky, under the guise of a handsome youth, in answer to the prayers of a young man at his fast of virility, or coming to manhood."

John Fiske wrote: "The ancient Americans had a cereal plant peculiar to the New World, which made comparatively small demands upon the intelligence and industry of the cultivator. Maize or 'Indian Corn' has played a most important part in the history of the New World, as regards both the red men and the white men. It could be planted without clearing or ploughing the soil. It was only necessary to girdle the trees with a stone hatchet, so as to destroy their leaves and let in the sunshine. A few scratches and digs were made in the ground with a stone digger, and the seed once dropped in took care of itself. The ears could hang for weeks after ripening, and could be picked off without meddling with the stalk; there was no need of threshing and winnowing. None of the Old World cereals can be cultivated without much more industry and intelligence. At the same time when Indian corn is sown in tilled land, it yields with little labour more than twice as much food per acre as any other kind of grain. This was of incalculable advantage to the English settlers of New England, who would have found it much harder to gain a secure foothold upon the soil if they had had to begin by preparing it for wheat and rye without the aid of the beautiful and beneficent American plant."

Repeatedly the first white inhabitants of Massachusetts and Virginia were saved from hunger, and probably even from starvation, by the corn which they received by gift or purchase or stealing from the Indians. Vast fields of maize, in tens and sometimes hundreds of acres, were cultivated close to the larger villages of all the Indian tribes, as is well attested by the earliest chroniclers of our colonial history, and by the observations of the first travelers throughout all the eastern half of our country. In the accounts of the terrible Indian wars of tribal extermination, like those waged by the Iroquois against the Hurons and the Illinois, and in the campaigns of the French and later of the English against the Iroquois themselves, the wanton destruction

of their great cornfields and stores of corn saved for winter, or often for two or more years to guard against any failure of crops, excites our astonishment, and shows how large a share agriculture contributed to their subsistence.

The Hurons, especially, were a people whose large dependence on agriculture, with proportional deficiency as wandering hunters or marauding warriors, had made them an easy prey of the ferocious and pitiless Iroquois. One branch of this people were called the Tobacco tribe or nation, as before related, because they were remarkably addicted to the cultivation and use of tobacco, which also indeed was cultivated, though in less degree, by all the tribes, and was another gift from America to the world. Groseilliers and Radisson noted the extensive deserted fields of the Hurons, depopulated by raids of their Iroquois enemies, about the south part of Georgian bay, the great eastern arm of the lake which bears their name. Wherever their straggling remnants migrated, to the Illinois Indians on the Illinois river, to the Upper Iowa river, to Prairie island, and soon afterward to the interior of northern Wisconsin and to Chequamegon bay, they carried superior knowledge and practice of agriculture, for which reason they occupied this beautiful island of the Mississippi a few years, until compelled to abandon it by the frequent attacks of the neighboring Sioux.

All the chief varieties of maize, as that with small and hard yellow kernels, cultivated farthest north, the more rank plant with large indented kernels, whether yellow or white, cultivated through the southern part of this country, the white sweet corn, and pop corn, had originated in cultivation by the American race before the Columbian discovery. But the ancient native habitat of this species, the only one of its genus, has not been surely ascertained. As a wild plant, it may have become extinct. How long it has been cultivated, we cannot closely estimate; but its very diverse varieties, like those of many cultivated plants, point to a great antiquity.

Speedily after Columbus and his successors established commerce between the New and Old Worlds, maize was carried into Europe and Asia, and became a staple crop in many countries,

from the Mediterranean region to China. Today it feeds more people than any other article of food, excepting perhaps rice.

A good exhibition of aboriginal agriculture in Minnesota, untaught by white men, was seen by me in September, 1885, at the Ojibway village a mile southeast of the Narrows of Red lake. This largest village of the Ojibways in this state then consisted of thirty or forty permanent bark lodges, scattered on an area reaching a half mile from northwest to southeast and about an eighth of a mile wide. Adjoining the village were fields of ripening Indian corn, amounting to about fifty acres, besides about five acres of potatoes and probably an acre or more of pumpkins and squashes. These crops showed a luxuriant growth and abundant yield, and the weeds among them had been held in check by hoeing. During the spring, summer, and autumn, most of the one hundred and fifty or two hundred inhabitants of this village are usually absent in expeditions for hunting, and in successive portions of the season to make maple sugar, to gather Seneca snakeroot for sale, to pick cranberries, and to reap the natural harvest of wild rice (*Zizania aquatica L.*) which grows plentifully in the streams and shallow lakes of that region.

In the prairie country of Minnesota, the Dakotas, and the far western plains, the place of the wild rice is partially supplied by the very nutritive, turnip-like root of the pomme de terre (*Psoralea esculenta* Pursh), from which plant the Pomme de Terre river in the west part of this state is named. The root of this species, common southwestward, is dried, pulverized, and used as flour by the Sioux, being their most valuable wild vegetable product to supplement their formerly habitual main diet of game and fish.

NAMES OF INDIAN DERIVATION.

Only a few words have been adopted into common use in our language from the original American languages of the red men. Intimately connected with the life of the Indian were the Algonquian wigwam and the Sioux tepee; the tomahawk of war;

wampum, which served as money and for ornament, and the quahog or round clam of the Atlantic shores, from whose shell the wampum was made; the powwow, or Indian council, and the sachem, or the sagamore, who presided; the squaw, and the papoose; succotash, or corn and beans cooked together, a favorite Indian dish, as also ponc, samp, hominy, and pemmican; the tamale, a highly seasoned mixture of crushed Indian corn and minced meat, wrapped in cornshucks and baked or steamed; the barbecue, or roasting of a large animal entire; the hurricane of the West Indies and our southeastern coast; the muskegs, or mossy marshes, of the Canadian Northwest; the totem, the canoe, the toboggan, and the moccasin. From the Indians, too, is derived the wangun, in which are stored the supplies of the lumbering camp and of driving logs on the rivers.

Several of our mammalian animals, in a larger proportion than inanimate objects familiar to the Indians, retain their aboriginal names, though often with changes of form and pronunciation. Thus we have, from their languages, the moose and the caribou; the puma, and his other name, cougar; the coyote, racoon, and opossum; the skunk, the musquash, the woodchuck, and the chipmunk.

Of freshwater and marine fishes, the maskalonge (with variable spelling), the menhaden, tarpon (probably), tautog, and tomcod, are Indian names, some of them much changed and anglicized.

Among species or genera of plants first known in America, a considerable number bear Indian names, as maize, the potato, the tomato, the squash, the tuckahoe, the persimmon, the catalpa, the chinkapin, the hickory, the tamarack or hackmatack, cohosh, puccoon, kinnikinick, and tobacco.

Geographic names given by the red men far more abundantly survive their departure, and these memorials will endure as long as this country shall be occupied by our white race. All over America, from the Arctic sea to Patagonia, many aboriginal names are preserved by brooks, creeks, rivers, lakes, hills and mountains, and by the white man's villages, cities, counties, and states.

In Minnesota these names derived from the Dakota or Sioux language have been quite fully noted in a paper of nine pages by Prof. A. W. Williamson, of Augustana College, Rock Island, Ill., who was brought up in the area of this state, his father, Rev. Thomas S. Williamson, having come here in 1835 as one of the first missionaries to the Sioux. A similar but longer paper, in twenty-seven pages, on our geographic names of Ojibway origin, has been prepared by Rev. J. A. Gilfillan, who was long a missionary among that people. These exceedingly interesting papers are published respectively in the Thirteenth and Fifteenth Annual Reports of the Geological and Natural History Survey of Minnesota, for the years 1884 and 1886.

Extensive additional manuscripts on Ojibway proper names, both of places and persons, have been donated by Mr. Gilfillan to the Minnesota Historical Society. The place names in these lists, and notes of the origin and meaning of all geographic names in this state, now being compiled and alphabetically arranged by the present writer, are expected to be published as one of the volumes of this society's Historical Collections.

Minnesota receives its name from the longest river which lies wholly within this state, excepting only its sources above Big Stone lake. During a hundred and sixty years, up to the time of the organization of Minnesota Territory, in 1849, the name St. Pierre, or St. Peter, had been generally applied to this river by French and English explorers and writers, probably in honor of Pierre Charles Le Sueur, its first white explorer. The aboriginal Sioux name Minnesota means sky-tinted water (Minne, water, and sota, somewhat clouded), as Neill assures us, on the authority of Rev. Gideon H. Pond. The river at its stages of flood becomes whitishly turbid. An illustration of the meaning of the word is told to me by Mrs. Moses N. Adams, the widow of the venerable missionary of the Dakotas. She states that at various times the Dakota women explained it to her by dropping a little milk into water and calling the whitishly clouded water "Minne sota." This name was proposed by General Sibley and Hon. Morgan L. Martin, of Wisconsin, in the years 1846 to 1848, as the name of the new territory, which

thus followed the example of Wisconsin in adopting the title of a large stream within its borders. During the next few years after the selection of the territorial name Minnesota, it displaced the name St. Peter as applied in common usage by the white people to the river, whose euphonious ancient Dakota title will continue to be borne by the river and the state probably long after the Dakota language shall cease to be spoken.

The name Itasca, devised in 1832 by Schoolcraft for the lake at the head of the Mississippi, had been urged by Rev. William T. Boutwell for the territory. Other names were suggested in the discussions of Congress, as Chippeway, Jackson, and Washington. Final choice of the name Minnesota was virtually decided in the convention held at Stillwater on August 26, 1848, which petitioned to Congress for territorial organization.

Carver was the earliest author to record this Sioux name of the river. He spelled it Menesoter in his Travels, and Minesoter on the accompanying map. It was spelled Menesota by Long and Keating; Menisothe by Beltrami; Mini-sotah by Nicollet; Minnay Sotor by Featherstonhaugh; Minesota by Hon. M. L. Martin and Hon. Stephen A. Douglas, in bills introduced by them respectively in the House and Senate for organization of the territory; and Minnesota by Hon. H. H. Sibley at the Stillwater convention.

Similarly the Mississippi, having its source and receiving its name in this state, will retain for all time that Algonquian title, which means simply the Great River. Such it is, being the second among the great rivers of the world, surpassed only by the Amazon.

Jean Nicolet, the first white explorer of Wisconsin, in the winter of 1634-35, went from Lake Michigan and Green bay to Lake Winnebago and the upper Fox river, and learned there from the Indians that the sea, as he understood them to say, was within three days' travel farther to the southwest. What he heard of was the Mississippi river.

It was first made known by name to Europeans in the Jesuit Relation of 1666-67, published in Paris in 1668, which mentions "the great river named Messipi." The Relation of

1670-71 gave a more definite description as follows: "It is a Southward course that is taken by the great river called by the natives Missisipi, which must empty somewhere in the region of the Florida sea, more than four hundred leagues hence [from the upper Great Lakes] * * * Some Savages have assured us that this is so noble a river that, at more than three hundred leagues' distance from its mouth, it is larger than the one flowing before Quebec; for they declare that it is more than a league wide [referring probably to its expansion in Lake Pepin]. They also state that all this vast stretch of country consists of nothing but treeless prairies."

Earlier names had been given by the Spaniards to this river in its lower part, seen by their expeditions. Thus, on the map resulting from Pineda's exploration of the Gulf coast in 1519, the Mississippi is named Rio del Espiritu Santo (River of the Holy Spirit); and it continued to be commonly or frequently mapped under that name until its present Algonquian designation was generally adopted.

Father Marquette, writing of his canoe voyage on this river in 1673, with Joliet, called it the Missisipi, but his map named it "R. de la Conception."

Hennepin, in the first edition of his travels, published in Paris in 1683, called the Mississippi the River Colbert, for the great French statesman who died that year, and so mapped it; but later editions named and mapped it as "Le Grand Fleuve Meschasipi."

La Salle, writing August 22, 1682, designated it as "the river Colbert, named by the Iroquois Gastacha, by the Ottawas the Mississipy." Elsewhere, however, in the same and other writings, La Salle and his companions more commonly used only the latter name, spelling it Mississipi.

Perrot, after spending many years on the upper part of this river, in his Memoir written in 1718 or within two or three years later, spoke of "the Micissypy, which is now named the Louisianne;" and a French map published in 1718 gives the name as "the Missisipi or St. Louis."

Carver, who traveled into the area of Minnesota in 1766, described and mapped this river with its present spelling, Mississippi, which was followed by Pike, Cass and Schoolcraft, Long and Keating, Beltrami, and all later writers. Before this form became fully established, the name, as printed in books and maps, had many variations, which, according to an estimate by Dr. Elliott Coues, number probably thirty or more.

The first part of the name, Missi, means Great, being akin to the modern Ojibway word, Kitchi, great, or Gitche, as it is spelled by Longfellow in "The Song of Hiawatha;" and the second part, sippi, otherwise spelled sipi or sebe, or zibi, is the common Algonquian or Ojibway word for a river. This name, received from the Ojibways and other Algonquins by the earliest French missionaries and traders in the upper Mississippi region, though used by these Indians only for the upper part of the river as known to them, was extended by Marquette and La Salle to its entire course, displacing the numerous former Indian names which had been applied to its lower part.

Rev. J. A. Gilfillan writes: "Below the junction of Leech Lake river, it is called Kitchi-zibi, or Great river. I cannot find by inquiry that the Chippewas [Ojibways] have ever called it Missizibi (Mississippi) or Missazibi. But I consider it very probable that in remote times they did, for Missa-zibi (Mississippi) would express the same idea in their language, and would be proper, as witness Missa-sagaiigun (Mille Lacs), meaning Great lake. It so exactly corresponds with their language that it must have been taken from it."

Endeavoring to translate more fully the aboriginal significance of Missi, Gannett says that Mississippi means "great water," or "gathering in of all the waters," and "an almost endless river spread out."

The phrase, "Father of Waters," popularly given to this river, has no warrant, as Featherstonhaugh and Schoolcraft affirm, in the Algonquian name. In 1854 Schoolcraft wrote: "The prefixed word Missi is an adjective denoting all, and, when applied to various waters, means the collected or assembled mass of them * * * It is only symbolically that is can be called the Fa-

ther of American rivers, unless such sense occurs in the other Indian tongues."

From the Ojibways we receive also the following names of Minnesota rivers and lakes: Manitou river, flowing into Lake Superior; Saganaga lake, meaning surrounded by thick forests, on our northern boundary; Kawishiwi river, meaning full of beaver's houses; the Eshquaguma lake, meaning the last in a series; Lake Bemidji, meaning Cross lake, because the head stream of the Mississippi crosses it, flowing in at one side and out at the opposite side; Lake Winnebagoshish, meaning wretched and dirty water, because this large shallow lake is much roiled by its waves under heavy winds; Pokegama lake, having bays branching off; Sisabagama lake, five miles east-southeast of Aitkin, meaning the lake with arms running in all directions; and Nokasippi, meaning the river of an Indian having the totem of the bear.

Other Ojibway names are the Misquah hills, meaning red, north of Lake Superior, having the greatest altitude in this state; the Mesabi range of high lands, meaning the Giant's range, famed for its marvelously rich deposits of iron ore; Biwabik, a mining town there, meaning iron; Chippewa river and county, named for these Ojibway or Chippewa people; Chisago lakes and county, named by Mr. W. H. C. Folsom, from Ojibway words meaning large and beautiful; Kanabec county (accented on the second syllable), meaning snake, from the Ojibway name of the Snake river; and Wadena, the name of a county and its largest town and county seat, for the old Wadena trading past, which was situated in the southeastern part of this county, on the Crow Wing river between the mouths of the Leaf and Partridge rivers. This last name, an obsolete Ojibway word, signifies "a little round hill," and may refer to the rounded outlines of the Crow Wing bluffs at the old Wadena ferry. It is also a somewhat common personal name of men in this tribe.

The two new counties of Minnesota, Koochiching and Mahnomen, whose establishment was completed by proclamations of the governor in December, 1906, bear Ojibway names.

Koochiching is the name applied by the Ojibways to Rainy lake, and also to the Rainy river and to its great falls and rapids at the town of International Falls. It is translated by Rev. J. A. Gilfillan as Neighbor lake and river, or, under another interpretation, a lake and river somewhere. He remarks that this word is of difficult or uncertain meaning, and that, although in common Ojibway use, it does not strictly belong to that language.

Mahnomen is the Ojibway name of the wild rice. From this excellent native grain we have also the English name of the Wild Rice lakes and of the Wild Rice river, which has its source in these lakes and flows through Mahnomen county. The same word has been often spelled Manomin, and in this spelling was the name of a former very small county of this state between Anoka and St. Anthony (the east part of Minneapolis), existing from 1857 to 1869. With other orthographic variations, it appears in the names of the Menominee tribe of Indians, Menominee river, county, and city, in Michigan, and Menomonee river, as well as the towns of Menomonee Falls and Menomonie, in Wisconsin.

One of our most interesting Indian names is that of the Watab river, tributary to the Mississippi from the west about five miles north of St. Cloud. This is the Ojibway word for the long and very slender roots of both the tamarack and the jack pine, which were dug by the Indians, split and used as threads in sewing their birch bark canoes. Both these coniferous trees grow on or near the lower part of the Watab river.

The same name has also a historical interest from the former Watab trading post, about two miles and a half north from the mouth of the Watab river and on the opposite or eastern side of the Mississippi. During about ten years next following its establishment in 1848, Watab was the most important commercial place in Minnesota Territory northwestward from St. Paul; but later it was superseded by Sauk Rapids and St. Cloud, and before 1880 the village entirely disappeared.

In the same part of this state, the Sauk river, Sauk Rapids, Sauk Centre, the Sauk lakes, and also Lake Osakis, preserve a record of the former presence of Sauk or Sac Indians there. Likewise the high Assiniboine bluff of the Mississippi valley, in

the north part of Goodhue county opposite to the southern end of Prairie island, tells of some Indian of the Assiniboine tribe, or a party of them, who traveled or perhaps once lived there.

From the Sioux language, in addition to the name of the Minnesota river and of this state, before noted, we have the following geographic names, which are arranged in alphabetic order:

Anoka, on both sides, the name given by its founders to the city laid out on both sides of the Rum river near its mouth, and thence applied to the county;

Chaska, a town bearing this name of the firstborn of a Sioux family if a son, as Winona, a city and county, is the common or frequent Sioux name bestowed on the firstborn if a daughter;

Cokato and Chokio, names of two railway villages, meaning at the middle;

Dakota, a county, and also a village, meaning an alliance or league, especially that of the many Sioux bands or tribes;

Eyota, greatest, or most, a township and village in Olmsted county;

Hokah, a root, formerly the name of the Root river, and now a township and village near its mouth;

Isanti, from isan, knife, applied to a county, township, and village, named for the great Isanti band or tribe, anciently Izatys, now Santees;

Kandiyohi lakes, village, township, and county, meaning where the buffalo fish come;

Kaposia, light, of little weight, referring to swiftness of running, designating the Sioux band of successive hereditary chiefs named Little Crow, and their village, long occupied on a part of the site of South St. Paul;

Kasota, a village and township, noted for limestone quarries, meaning clear or cleared off;

Mahtomedi, meaning White Bear lake, applied to a village, largely of summer homes, on the northeast side of this lake;

Mahtowa, a township of Carlton county, also referring to a white bear or a grizzly bear;

Mankato, the largest city on the Minnesota river, meaning blue earth, the Sioux name of the Blue Earth river, more properly to be spelled Mahkahto, if we give the aboriginal pronunciation;

Mendota, the village at the junction of the Minnesota and Mississippi rivers, meaning the mouth of a river;

Minneapolis, meaning water city, a name half Sioux and half Greek, adopted in 1852;

Minnehaha, meaning literally a waterfall, or, speaking poetically, laughing water, a name compounded of Sioux words by white people;

Minneiska, white water, a township and village in Wabasha county;

Minneola and Minneota, referring to water, names respectively of a township in Goodhue county and a village in Lyon county;

Minneopa, the second water, the name of the lower one of two waterfalls near together on Minneopa creek, now comprised in a state park;

Minnetonka, big water, the name given to this large and very beautiful lake by Governor Ramsey and others of an exploring party in 1852;

Minnewashta, good water, the large lake in Pope county formerly called White Bear lake, and afterward Lake Whipple;

The Okabena lakes, at Worthington, meaning the resting place of herons;

The city of Owatonna, meaning straight, this having been the Sioux name of the Straight river;

The city of Shakopee, bearing the hereditary name of a Sioux chief, meaning Six, while his son was named Shakpidan, Little Six;

Tintah, a prairie, the name of a township and railway village in Traverse county, and of a beach of the Glacial Lake Agassiz;

Wabasha, a city and county, and one of the principal streets in St. Paul, meaning red battle standard, the hereditary name of

successive Sioux chiefs, whose village was on or near the site of Winona;

Wacouta, he shoots, the name of a Sioux chief whose band lived on the site of the city of Red Wing, applied to a small township next east of that city;

Waseca, a city and county, meaning rich or fertile;

Wasioja, the place of pines, a township and village in Dodge county;

Wayzata, at the north, a village on the north side of the eastern end of Lake Minnetonka;

Watonwan river and county, meaning, as told me by Rev. M. N. Adams, fish bait, or where fish bait abounds;

And Winona, a city and county, already defined in its Sioux meaning as correlative with Chaska, in the early part of this list.

It may properly be noticed that two well known names in this state, those of Itasca lake and county and the Zumbro river, with the village and township of Zumbrota, are not of Indian origin, although one or both might be supposed to be so. Itasca was coined by Schoolcraft from the Latin words, veritas, truth, and caput, head, joining them together and eliding the initial and final syllables, to designate the true head or source of the Mississippi; and Zumbro is a corrupted form of the French words, des Embarras, applied to this river because of its difficulties for canoeing.

Besides the many Ojibway and Sioux names here catalogued, a much greater number of our Minnesota geographic names, applied to hundreds of creeks, rivers, lakes, townships, villages, etc., are derived from the Indian names, being directly translated into English. This part of our inheritance from the aboriginal owners of this area, and the names which we have noted as still retained in their own languages, are the most ancient memorials preserved in our history and literature, always to remain but seldom to be thought of in their full significance.

Chapter VI.

GROSEILLIERS AND RADISSON, THE FIRST WHITE MEN IN MINNESOTA.

PUBLICATION OF RADISSON'S MANUSCRIPT.

THE narratives of the earliest travels and exploration by Europeans within the area of Minnesota, written by one of the two hardy adventurers whose experiences are there chronicled, remained unknown to historians during more than two hundred years. This precious manuscript record, beginning the history of the occupation of our state by white men, is said by its editor, Gideon D. Scull, of London, to have been "for some time the property of Samuel Pepys, the well-known diarist, and Secretary of the Admiralty to Charles II and James II. He probably received it," as the editor further states, "from Sir George Cartaret, the Vice-Chamberlain of the King and Treasurer of the Navy, for whom it was no doubt carefully copied out from his rough notes by the author, so that it might, through him, be brought under the notice of Charles II. Some years after the death of Pepys, in 1703, his collection of manuscripts was dispersed and fell into the hands of various London tradesmen, who bought parcels of it to use in their shops as waste-paper. The most valuable portions were carefully reclaimed by the celebrated collector, Richard Rawlinson." The papers relating the expeditions of Groseilliers and Radisson to the upper Laurentian lakes and the upper Mississippi river came into the possession of the Bodleian Library, at Oxford University; and other manu-

scripts, relating their service later for the Hudson Bay Company, were purchased by the British Museum.

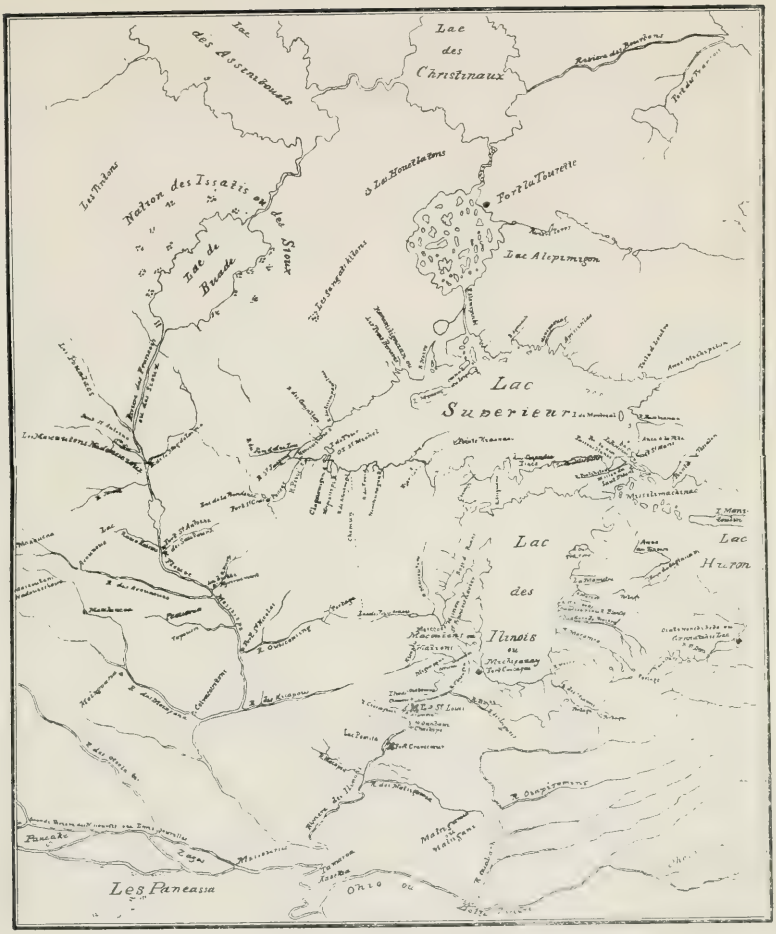
In these two largest libraries of England, the quaint narratives of Radisson rested in quiet until about twenty years ago they were published by the Prince Society of Boston, which is devoted to the preservation and publication of rare original documents relating to early American history. The title-page reads as follows: "Voyages of Peter Esprit Radisson, being an Account of his Travels and Experiences among the North American Indians, from 1652 to 1684. Transcribed from original Manuscripts in the Bodleian Library and the British Museum. With Historical Illustrations and an Introduction, by Gideon D. Scull, London, England. Boston: Published by the Prince Society, 1885." It is a small quarto book of 385 pages. The edition was limited to two hundred and fifty copies, one of which is in the Library of the Minnesota Historical Society, and another in the Duluth Public Library.

By this book Groseilliers and Radisson are made known to the world as the first Europeans to reach the upper Mississippi river and to traverse parts of Minnesota. It is a source of much regret, however, that Radisson is found to claim more discoveries than can be true. His narration, besides being very uncouth in style, is exceedingly deficient in dates, sometimes negligent as to the sequence of events, and even here and there discordant and demonstrably untruthful. Therefore much discussion has arisen concerning its significance and historical value.

BIOGRAPHIC SKETCHES OF GROSEILLIERS AND RADISSON.

Previous to this publication, history had a general outline of the achievements of these remarkable men, who were brothers-in-law, close friends, and lifelong companions in various enterprises demanding great courage and endurance.

Medard Chouart, more commonly known by his assumed title Sieur des Groseilliers, was born in France, probably near



PORTION OF MAP MADE BY J. B. FRANQUELIN, 1688.

Meaux, in 1621. At the age of twenty years, or perhaps three or four years earlier, he came to Canada. During several years, until 1646, he was in the service of the Jesuits as a layman helper in their missions to the Indians, and thus learned the Huron and Algonquin languages. Afterward he was a fur trader, probably making yearly trips to the country of the Hurons. In 1647 he married Helene, a daughter of Abraham Martin, from whom the historic Plains of Abraham at Quebec received their name. His wife died in 1651, and two years later he married Marguerite, a sister of Radisson. Thenceforward these brothers-in-law were closely associated in important explorations and extension of trade with the Indians of the Northwest and the region of Hudson bay.

Pierre Esprit Radisson was also born in France, probably at St. Malo, a seaport of Brittany. In 1651, at the age of only fifteen or sixteen years, he came to Canada, and lived with his parents at Three Rivers. Previously he had seen Paris, London, Italy, and Turkey, being probably a sailor. In England and from English sailors he may have acquired our language in boyhood, which he afterward wrote with such facility of colloquial and idiomatic expression, in the narratives published by the Prince Society.

The next year after his arrival in Canada, Radisson was captured by a roving band of the Iroquois, with whom he lived about a year in their country, on the Mohawk river. Escaping to Fort Orange (now Albany), he reached New Amsterdam (now New York), and sailed to Holland and thence to Rochelle, France. In the spring of 1654 he returned to Three Rivers in Canada. This captivity is the first of the four "voyages" of Radisson narrated in the published volume.

During the next six years, 1654 to 1660, Groseilliers and Radisson made two expeditions for exploration and traffic in furs, going farther westward than any white man preceding them. In these expeditions, called voyages by Radisson, they passed beyond the upper great lakes, Michigan and Superior, penetrating to the area of Minnesota; and the narration asserts that in the second expedition they traveled to Hudson bay.

When they returned from the second expedition, which had been undertaken without permission from the Governor of Canada, he imposed heavy fines upon them and a duty of 25 per cent. on the value of their furs. To seek redress for this injustice, Groseilliers went to France, but his appeal was in vain. They next entered the service of Boston merchants, and sailed in a New England ship to Hudson strait in the autumn of 1663; but, on account of the lateness of the season, the captain refused to advance into Hudson bay, where they designed to establish trading posts.

In 1665, having laid their plans for trade in the Hudson Bay region before commissioners of the King of Great Britain, whom he had sent to New York and New England, Groseilliers and Radisson went with one of these commissioners, Sir George Cartwright, to England. Under the patronage of Charles II, they aided in founding the Hudson Bay Company, which received its charter in 1670. The commercial power which they would have preferred to bestow on their own country was thus given to Great Britain. Radisson about this time married an English wife, the daughter of John Kirke, who became one of the directors of this company.

In 1674, because of a dispute with the Hudson Bay Company, Groseilliers and Radisson transferred their allegiance again to France, and through the next ten years were active in advancing French colonization and commerce. In their renewed loyalty, they endeavored to supplant the English in the Hudson Bay trade by building a French trading post on the Nelson river, near its mouth, and there captured a New England ship.

During the consequent negotiations, however, between the French and English governments, Groseilliers and Radisson considered themselves unjustly treated by the French court; and, being welcomed back by the directors of the Hudson Bay Company, Radisson once more entered their service. According to his own words, he then, in May, 1684, "passed over to England for good, and of engaging myself so strongly to the service of his Majesty, and to the interests of the Nation, that any other consideration was never able to detach me from it."

Groseilliers, on the contrary, declined to accept the salary or pension offered to him by the Hudson Bay Company, "twenty shillings per week, if he came from France over to Britain and be true." Here the brothers-in-law were separated, after thirty years of most intimate association. Nothing further is known of Groseilliers, and it seems probable that he died not long afterward in Canada.

The life of Radisson after this second desertion from France has been recently traced by Prof. George Bryce, of Winnipeg, through his researches in the archives of the Hudson Bay Company in London. Having sailed from England in May, 1684, Radisson traitorously took possession of the chief French trading post of Hudson bay, on the Hayes river, compelling his nephew, the son of Groseilliers, to surrender the post, which was under his command, with a vast quantity (twenty thousand) of valuable peltries that had been collected there. These furs were sold in England for 7,000 pounds. Radisson voyaged later, in 1685, and also in 1687 and 1688, to Hudson bay for this company, and he received a pension from it, affording a scanty means of living for himself and his family, until the beginning of the year 1710. As the pension then ceased, it is inferred that he died, probably in London or its vicinity, before the next quarterly date for payment, his age being seventy-four years.

PECULIARITIES OF RADISSON'S WRITINGS.

The editor states in his introduction to Radisson's narratives: "All his manuscripts have been handed down in perfect preservation. They are written out in a clear and excellent handwriting, showing the writer to have been a person of good education."

The president of the Prince Society, in his preface of the same volume, says: "The narratives contained in it are the record of events and transactions in which the author was a principal actor. They were apparently written without any intention of publication, and are plainly authentic and trustworthy. * * * The author was a native of France, and had

an imperfect knowledge of the English language. The journals, with the exception of the last in the volume, are, however, written in that language, and, as might he anticipated, in orthography, in the use of words, and in the structure of sentences, conform to no known standard of English composition. But the meaning is in all cases clearly conveyed, and, in justice both to the author and reader, they have been printed *verbatim et literatim,* as in the original manuscripts."

By extracts given further on, describing the two expeditions to Minnesota, the style of Radisson's writing will be well shown. Many parts of the narration where we should wish quite complete statement are given very briefly or are omitted entirely. Other parts, on the contrary, have a fullness of garrulous detail which brings to view very vividly the many adventures, hardships and dangers encountered among the savages, with frequent descriptions of their manner of life in the wigwam, in their rude agriculture, in the hunt, on the war path, and in councils of public deliberation. The details are everywhere consistent with the now well known characteristics of these Indian tribes, and they thus bear decisive testimony that the narrator had actual experience by living long among them.

Radisson had a very thorough familiarity with homely, apt and forcible expressions of our English language, such as could only be acquired by living with English-speaking people, certainly not merely from school studies or books. It is probable, as before stated, that he had learned this language before going to Canada; but later, by his life in New England and in the service of Boston merchants during the years from 1661 to 1664, he had doubtless added greatly to his acquaintance with the vernacular.

The narratives of the four expeditions, which are called by Radisson "voyages," appear to have been written in 1665, with a slight addition three years later, their purpose being to promote the interests of the two adventurers when first seeking alliance with the English for establishing trade with the Hudson bay. The writer took especial care to show the great prospective advantages of opening the fur trade with new regions at the

north, and of gaining possession by colonies in the vast fertile country of Lake Michigan and the upper Mississippi region.

That the routes and localities of the farthest western explorations by Groseilliers and Radisson, and of their councils with the Indians to establish the fur trade in the area of Minnesota, were not earlier fully studied out and ascertained, is doubtless attributable mainly to deficiencies of Radisson's narratives; but also must in part be ascribed to the limitation of their publication, in an edition of only two hundred and fifty copies, of which only two are in Minnesota. Only three or four students of history in this state have made careful examination of this book; and these studies, with those of other historians in Wisconsin and elsewhere, have gradually brought me to the results stated here. The present chapter is based on my more complete memoir of this subject published by the Minnesota Historical Society (in its Collections, Volume X, Part II, 1905, pages 449-594). An essential clue for identification of the locality of greatest interest in the second of these expeditions to Minnesota was supplied by the late Hon. J. V. Brower, who found that Knife lake and river, in Kanabec county, were so named because there the Sioux of the Mille Lacs region first obtained iron and steel knives from white men, thence also receiving themselves the name of Isanti or Knife Sioux, by which they were known to Du Luth and Hennepin.

AGREEMENT AND DISCREPANCY WITH OTHER RECORDS.

The two western expeditions are paralleled by the *Jesuit Relations,* which were yearly reports of the progress of missionary work, including also many incidental references to other Canadian history. Another contemporary record, the *Journal of the Jesuits* for the year 1660, contains a very interesting detailed statement of the return of these travelers and traders from their second trip west, accompanied by three hundred Indians, and bringing a rich freight of furs. The Relations for 1660 mention two Frenchmen returning at this time, with

similar details of their expedition, as the return of two Frenchmen was also noted by the Relations for 1656; but in both instances they refrain from giving the names of these daring and successful explorers. In the Journal we are informed that Groseilliers was one of the two returning from the second of these expeditions.

Henry Colin Campbell, of Milwaukee, Wis., who has very carefully studied the chronology of this subject, writes: "Taking all the circumstancces into consideration, it would not be easy to find three distinct accounts of one expedition into a strange country that tallied more closely than do the accounts of that voyage to Lake Superior which we find in the *Jesuit Relations,* the *Journal of the Jesuits,* and Radisson's *Journal.* The return of Radisson and Groseilliers from their second trip, the one to Lake Superior, in August, 1660, is thus fully proven."

The duration of the first expedition west, in which Radisson claims to have traveled far southward, to a latitude where "it never snows nor freezes, but is mighty hot," he asserts to have been three years; but the Jesuit Relations state distinctly that the expedition which returned in 1656 had occupied only two years. In this discrepancy we must certainly rely on the Relations as truthful, for reasons to be presently more fully explained. When the fictitious year, as it may be called, is eliminated from this expedition, taking away the pretended journey to the shores of the Gulf of Mexico, the remaining narration of Radisson for the two years actually spent in the region of Lake Michigan and on Prairie island in Minnesota seems entirely trustworthy, bearing many and indubitable evidences of its truth.

Comparing this narration with the Jesuit Relations, Campbell well summarizes the general agreement as follows: "Our two Frenchmen, like the nameless Frenchmen of 1654-1656, visited the Pottawatamies and the Maskoutens, the latter in the interior of Wisconsin. Radisson and Groseilliers, like the two nameless Frenchmen, were delayed in returning the first spring by the Indians. Their return, likewise, caused great joy in the colony, and salvos of artillery were also fired in their honor

from the battlements of Quebec. We have already observed that the whereabouts of Radisson and Groseilliers from 1654 to 1656 can be accounted for in no other way than by making them identical with the two nameless Frenchmen; and, moreover, Radisson and Groseilliers, if they were the two nameless Frenchmen, would have had a year in which to rest, after their return, as Radisson says that they did."

CHRONOLOGY OF THE FOUR EXPEDITIONS.

In writing of the western expeditions, which most interest us because they extended to the area of Minnesota, Radisson seldom exactly noted the date of any event by the month and never by the number of the year. Much confusion has arisen, therefore, among historians in determining the years when these expeditions took place.

Some authors, as Scull, the editor of the Prince Society's volume, Dionne, the librarian of the Legislature of Quebec, Sulte, in his elaborate studies of this subject, Dr. Edward D. Neill, R. G. Thwaites, and Prof. George Bryce, have held that the first western expedition of Groseilliers and Radisson terminated in 1660, being the second of the two mentioned in the Jesuit Relations of 1656 and 1660. They consequently refer the second western trip narrated by Radisson to the years 1661-63, or to 1662-64.

Others, including Campbell, before quoted, the late Alfred J. Hill and Hon. J. V. Brower (in Volume VII of the Minnesota Historical Society Collections), and the late honored and beloved Captain Russell Blakeley, vice president of this society (in Volume VIII of the same series), with most ample reasons consider the two western voyages of these explorers to be identical with those reported in the Relations, treminating respectively in 1656 and 1660. This view is so clearly set forth by Campbell that it must be confidently accepted; indeed, the accurately known records in these narratives and other contemporaneous writings prove it conclusively.

Radisson's captivity with the Iroquois, called his first voyage, was, as we have seen, in 1652 and 1653, his first and second years after coming to Canada. Having escaped to France and thence come back to his home at Three Rivers early in 1654, he set out in the summer of that year with his brother-in-law on their first voyage to the far west, from which they returned in 1656.

During the interval following, before the second voyage west, Radisson went to the Onondaga settlement in the central part of the area of New York state, and this expedition, called by him "the Second Voyage made in the Upper Country of the Iroquoits," occupied nearly a year, from July, 1657, to March or April, 1658. It is placed second by Radisson in his series of narrations; and he esplicitly says that the earliest western expedition was undertaken afterward.

He may have considered the geographic relationship more important than that of time, therefore placing the two Iroquois trips together, and the two in the far west likewise together, but he ought not to have said definitely, in so many words, that the first western trip followed the second among the Iroquois. By this arrangement of his writings, with the accompanying misstatement, Radisson misled Scull and others in respect to their chronologic order. It is to be remembered, however, in palliation of the falsehood, that a high regard for continued veracity in historical authorship, especially among travelers and explorers in America, was less common then, and lack of it more likely to pass undetected for a long period, than at the present time.

NARRATIVE OF THE FIRST WESTERN EXPEDITION.

The title or caption given by Radisson at the beginning of this narrative reads: "Now followeth the Auxoticiat Voyage into the Great and filthy Lake of the Hurrons, Upper Sea of the East, and Bay of the North." It occupies pages 134 to 172 in the publication by the Prince Society. No title is given for the second voyage west, which ensues in pages 173 to 247;

and we must extend the references to the Upper Sea (Lake Suprior) and the Bay of the North (Hudson Bay) to apply to that later western expedition. The great importance of the discovery of the upper Mississippi river was neglected in the title, doubtless because the more northern region of Hudson bay, easy to be reached by English ships, promised larger and earlier pecuniary profits in commerce.

Groseilliers and Radisson, voyaging in birch canoes with a small company of Hurons and Ottawas, came to Lake Huron by the usual route of the Ottawa river, and Lake Nipissing. Their Indian escort then divided, and a part went with the French travelers southward around Georgian bay and Lake Huron to Bois Blanc island and the strait of Mackinac. The first autumn and winter were spent in visiting from tribe to tribe in the region of Mackinac and Green bay. "I liked noe country," says Radisson, "as I have that wherein we wintered; ffor whatever a man could desire was to be had in great plenty; viz, staggs, fishes in abundance, all sort of meat, corne enough." He says of Lake Huron:

> The coast of this lake is most delightfull to the minde. The lands smooth, and woods of all sorts. In many places there are many large open fields where in, I believe, wildmen formerly lived before the destruction of the many nations which did inhabit, and took more place then 600 leagues about.

Lake Michigan, with its surrounding forests and prairies and Indian tribes, appeared even more fascinating to Radisson's enraptured and prophetic vision. He wrote of it in an ecstasy:

> We embarked ourselves on the delightfullest lake of the world. I took notice of their Cottages & of the journeys of our navigation. for because that the country was so pleasant, so beautifull & fruitfull that it grieved me to see that the world could not discover such inticing countrys to live in. This I say because that the Europeans fight for a rock in the sea against one another, or for a sterill land and horrid country, that the people sent heere or there by the changement of the aire ingenders sicknesse and dies thereof. Contrarywise those kingdoms are so delicious & under so temperat a climat, plentifull of all things, the earth bringing foorth its fruit twice a yeare, the people live long & lusty & wise in their way. What conquest would that bee att litle or no cost; what laborinth of pleasure should millions of people have, instead that millions complaine of misery & poverty!

So carried away was our author by his zeal to show to England the excellence of this fertile and vast interior of our continent that he yielded to the temptation to describe as actually seen by himself the far southward continuation of the same country, beyond the limits of his travels, but known to him by accounts of the roving Indians. To give time for this pretended southern exploration, Radisson here interpolated a fictitious year.

Attentively perusing the narative, I am impressed with the lack of details of journeys and experiences during the time between the first and second winters of Radisson's three years. He seems to have fabricated the story of that year, drawing his general descriptions of the southern half of Lake Michigan and the vast region beyond from what he could learn in conversation with the red men. He understood the Algonquian languages, and these people and their southern neighbors had occasional intercourse and travel from tribe to tribe, so that among the aboriginal ornaments and amulets in Minnesota and Manitoba were sea shells from the Gulf of Mexico. The implied voyage of Groseilliers and Radisson far down the Mississippi may therefore be rejected.

It is known with certainty that Radisson returned from France, after his Iroquois captivity, in the spring of 1654; and it seems also certain that he and Groseilliers returned to Quebec from their first western expedition in 1656. Therefore it appears clearly impossible that this expedition could have occupied a longer time than the two years which the Jesuit Relations accredit to it. The meagerness, vagueness, and misconceptions of the narration for the fictitious year will appear by the following quotations:

We meet with severall nations, all sedentary, amazed to see us, & weare very civil. The further we sejourned the delightfuller the land was to us. I can say that [in] my lifetime I never saw a more incomparable country, for all I have ben in Italy; yett Italy comes short of it, as I think, when it was inhabited, & now forsaken of the wildmen. Being about the great sea [Lake Michigan or the Gulf of Mexico?], we conversed with people that dwelleth about the salt water, who tould us that they saw some great white thing sometimes uppon

the water, & came towards the shore, & men in the top of it, and made a noise like a company of swans; which made me believe that they weare mistaken, for I could not imagine what it could be, except the Spaniard; and the reason is that we found a barill broken as they use in Spaine.

Evidently Radisson intended here, in saying that they found a Spanish barrel, to convey the impression that they came to the Gulf Coast, as also he almost surely meant by "the great sea," It is very significant, however, that he does not here allude to the great river Mississippi, on which route they would necessarily have come to that coast and returned from it by several weeks of laborious canoeing. His narration is thus like the playbill announcing "the tragedy of Hamlet, the character of the Prince of Denmark being left out."

Radisson continues in the same paragraph to describe the people there, with similar erroneous comprehension, based on hearsay that he partly misconstrued, as follows:

Those people have their haires long. They reap twice a yeare; they are called Tatarga, that is to say, buff. They warre against Nadoneceronons [the Sioux], and warre also against the Christinos [the Crees]. These 2 doe no great harme to one another, because the lake is between both. They are generally stout men, that they are able to defend themselves. They come but once a year to fight. If the season of the yeare had permitted us to stay, for we intended to goe backe the yeare following, we had indeavoured to make peace between them. We had not as yett seene the nation Nadoneceronons. We had hurrons with us. Wee persuaded them to come along to see their owne nation that fled there, but they would not by any means. We thought to gett some castors [beavers' skins] there to bring downe to the ffrench, seeing [it] att last impossible to us to make such a circuit in a twelve month's time. We weare every where much made of; neither wanted victualls, for all the different nations that we mett conducted us & furnished us with all necessaries. Tending to those people, went towards the South & came back by the north.

The Summer passed away with admiration by the diversity of the nations that we saw, as for the beauty of the shore of that sweet sea [i. e., great lake of fresh water]. Heere we saw fishes of divers, some like the sturgeons & have a kind of slice att the end of their nose some 3 fingers broad in the end and 2 onely neere the nose, and some 8 thumbs long, all marbled of a blakish collor [the shovel-nosed sturgeon]. There are birds whose bills are two and 20 thumbs long. That bird [the pelican] swallows a whole salmon, keeps it a long time

in his bill. We saw also shee-goats very bigg. There is an animal somewhat lesse then a cow whose meat is exceeding good. There is no want of Staggs nor Buffes. There are so many Tourkeys that the boys throws stoanes att them for their recreation. * * * Most of the shores of the lake is nothing but sand. There are mountains [sand dunes] to be seene farre in the land. There comes not so many rivers from [into] that lake as from others; these that flow from it are deeper and broader, the trees are very bigg, but not so thick. There is a great distance from one another, & a quantitie of all sorts of fruits, but small. The vines grows all by the river side; the lemons are not so bigg as ours, and sowrer. The grape is very bigg, greene, is seene there att all times. It never snows nor freezes there, but mighty hot; yett for all that the country is not so unwholsom, ffor we seldom have seene infirmed people.

It seems probable that a part of Radisson's information of the fauna, notably his reference to "shee-goats very bigg," belongs to the Rocky mountains, rather than the country of Lake Michigan and the Mississippi, which he is endeavoring to describe. His idea that the tribes of the far south, bordering on the Gulf of Mexico, habitually sent war parties each year into the country of the Sioux and the Crees, the latter living, then as now, north and northwest of Lake Superior, presents most decisive internal evidence that the narration of this year was gathered only from hearsay, for which, as we shall see, Radisson had splendid opportunity in his very long hunting excursion with the savages during the summer of 1655, starting from and returning to Prairie island.

When we come to Radisson's account of that next year, following his apparent fiction so vaguely and blunderingly told, he resumes his accustomed definiteness of details, telling us that in the early spring, before the snow and ice were gone, which forbade the use of canoes, these Frenchmen, with about a hundred and fifty men and women of the native tribes, traveled almost fifty leagues on snowshoes, coming to a riverside where they spent three weeks in making boats. This journey was, if I rightly identify it, from the vicinity of Green bay, in eastern Wisconsin, across that state to the Mississippi, reaching this river near the southeast corner of Minnesota or somewhat farther south, perhaps coming by a route not far from the canoe route of the Fox

and Wisconsin rivers. Thence they voyaged eight days up the river on which their boats had been made, to villages of two tribes, probably in the vicinity of Winona, where they obtained meal and corn, which supplied this large company until they "came to the first landing isle."

THE YEAR 1655-56 AT PRAIRIE ISLAND.

The description indicates that the voyageurs passed along Lake Pepin and upward to the large Isle Pelée (or Bald island), now called Prairie island, on the Minnesota side of the main river channel a few miles above Red Wing. On this island, which derived its names, both in French and English, from its being mostly a prairie, a large number of Hurons and Ottawas, fleeing from their enemies, the Iroquois, had recently taken refuge, and had begun the cultivation of corn. Their harvest the preceding year, on newly worked land, was small; but much corn would be needed for food during the long journey thence to Quebec with beaver skins, which canoe voyage, requiring a month or more, Groseilliers and Radisson wished to begin soon after their arrival at the isalnd. They were obliged to remain till the next year, and Groseilliers spent the summer on Prairie island and in its vicinity, one of his chief objects being to provide a large supply of corn for the return journey. Meanwhile Radisson went with hunting parties, and traveled "four months * * * without doing anything but go from river to river." He was enamored of the beauty and fertility of the country, and was astonished at its herds of buffaloes and antelopes, flocks of pelicans, and the shovel-nosed sturgeon, all of which he particularly described. Such was the first year, 1655, of observation and exploration by white men in Minnesota, and their earliest navigation of the upper part of the Mississippi river. Accompanied by several hundred Hurons and other Algonquins, and carrying a most welcome freight of furs, Groseilliers and Radisson returned to Montreal and Quebec in August, 1656. Their stay at Prairie island covered the period from April or May, 1655, to June, 1656, about fourteen months.

My identification, as thus stated, of Radisson's "first landing isle," according with a suggestion of Campbell, differs widely from the view taken by the late Captain Blakeley in his paper presented several years ago to the Minnesota Historical Society, published in Volume VIII of its Collections. He thought that island to be probably in Lake Saganaga, on the northern boundary of Minnesota. Therefore it becomes needful to give here quite explicitly the chief reasons for my assertion in favor of Prairie island. These may be received as conclusive, while yet indulging much leniency toward other views, because even the Indian geographic names, and also the direction of journeys, as northward, or southward, are generally wanting in the crude account of these earliest explorations in a previously unknown region.

First, the geographic features and distances of the route from Green bay or Lake Winnebago to the Mississippi, and up this river to Prairie island, seem to me harmonious with Radisson's narration; but, on the contrary, the route by Lake Superior and northward to Saganaga lake differs greatly from what is narrated of the snowshoe and canoe journeys.

Second, many of the Hurons and Ottawas, escaping from their foes, the fierce Iroquois, are known, by other and contemporaneous historical testimony, to have fled to the Mississippi and settled on Prairie island about this time; and the narration shows that the Indians who are said to have come newly there were Huron refugees. These Indians never penetrated to the far northern and cold country beyond Lake Superior.

Third, the cool climate and predominantly rocky land of our northern boundary from Lake Superior to the mouth of Rainy lake, with the altitude of Saganaga lake, 1,434 feet above the sea, and the small size and very rocky surface of its many islands, make corn-raising there, on a large scale, quite impossible; whereas the extensive Prairie island, 670 feet to 735 feet above the sea, and situated three and a half degrees farther south, with an easily cultivated and very productive soil, is by nature most admirably adapted for the primitive agricul-

ture of the aborigines and for their most valuable crop, Indian corn.

Fourth, Radisson distinctly says that in starting toward the great river and its "first landing isle," they bade farewell to the Indians of the Sault Ste. Marie and of the North.

Fifth, he also states that in the region of that island beavers were not so plentiful as "in the north part," showing clearly that they were then farther south than during the preceding winter, which they had spent about the northern end of Lake Michigan.

Sixth, the journey of return from that island was first to the south and then to the north. This description applies to the canoe voyage from Prairie island southward down the Mississippi, and then northward up the Wisconsin river and down the Fox river to Green bay. It could not describe any route of return from Lake Saganaga.

No other locality on or near the northern border of Minnesota can satisfy the requirements of the narration; nor can any other island in the Mississippi, or in any river of this region, meet these requirements so satisfactorily as Prairie island, which is the largest in all the course of the Mississippi. The identification seems to me to stand in the clearest light, without a shadow of reason for distrust.

Many islands had been passed in the long canoe journey up the Mississippi, but the "first landing isle" was the first having sufficient height and extent to be adapted for permanent settlement by the Indians and later by white men. This name seems to imply a second isle farther up the river, rising likewise above its highest flood stage and therefore permanently habitable, which conditions mark Gray Cloud island, about four miles long and one to two miles wide, situated about ten miles above Prairie island and five miles above Hastings. Both these islands were inhabited long before the coming of white immigration, and even at the time of this first expedition of Groseilliers and Radisson they were probably already known by the Indians as the first and second "landing isles." Each shows traces of very ancient occupancy, made known by Hon. J. V. Brower's arch-

aeologic examination and mapping of their aboriginal mounds, village sites, and places of canoe landings.

Isle Pelée, as Prairie island was called by the French, is ten and a half miles long, and has an average width of about two miles, with a maximum of two and three-fourths miles. Its area is about twenty square miles, and its highest part is 40 to 65 feet above the low water stage of the inclosing rivers. This large island lies between the Mississippi and a western tributary, the Vermillion river, which flow respectively along its northeast and southwest sides, each measuring more than ten miles. At its northwest or upstream end, the island is bounded by Truedell slough, which supplies, even at the lowest stage of water, a connection between the Mississippi and the Vermillion, usually carrying a current from the former to the latter; but during floods in the smaller river, when it is the higher, the current in the slough is reversed. In the highest floods from exceptional rains or from the snow-melting in spring, the Mississippi rises 16 to 18 feet above its lowest stage; and then it sends off a wide part of its waters along the course of the Vermillion, to reunite with the broader flood of the main river south of the island, which is reduced at such times to a length of about seven miles and a maximum width of only about one mile.

This island possesses several beautiful lakes, from a half mile to two miles long; and the largest, Sturgeon lake, has a width of a half mile. Timber grows along most parts of the shores of the lakes, and on the banks of both the Mississippi and Vermillion rivers, in some places reaching far from the shores; but about four-fifths of the island is prairie, as it was also undoubtedly when Groseilliers and Radisson came there. Excepting an extensive low and marshy tract on the northwestern part of the island, all its prairie is suitable for cultivation and is now occupied and used for farming, including not less than ten or twelve square miles, or about 7,000 acres.

As I traversed this historic island in early May of the year 1901, at nearly the exact season of the arrival of these Frenchmen two and a half centuries ago, my thoughts went back to that springtime, and I endeavored to picture their com-

ing with a hundred and fifty Indians to join those who a year or two before had come there, attracted by the fitness of the land for corn-raising. The island was then a great prairie as now, and its sedentary Indian population may have usually exceeded its present number of white inhabitants, perhaps a hundred and fifty, with their twenty-five or thirty farmhouses, two schoolhouses, and a church. Instead of the neighboring railways and villages of civilization, all the Mississippi basin from Lake Itasca to the Gulf was uninhabited by white men. But it had many Indian villages, many cultivated fields yielding abundantly, and unlimited supplies of fish and game. The native tribes had not yet obtained the firearms before which the buffaloes, elk and deer, and most of the wild fowl, have fallen and vanished away. Their traffic with Europeans was begun by these two daring explorers and traders.

Groseilliers at this date was thirty-four years old, and was well experienced in the hazardous life of a pioneer Indian trader, prudent, persevering, and successful. His comrade was scarcely twenty years old, full of courage, resourceful, fond of wild adventure, and eager to see new regions. If we compare their enterprise to a boat or ship, Groseilliers was like the ballast to keep the craft right side up, while Radisson was like the sail to give speed and distance.

It will be profitable to all Minnesota readers, that the part of Radisson's narration giving the journey to Prairie island and the events of their stay shall be here fully transcribed, as follows:

* * * Att last we declared our mind first to those of the Sault, encouraging those of the North, that we are their brethren, & that we would come back and force their enemy to peace or that we would help against them. We made guifts one to another, and thwarted a land of allmost 50 leagues before the snow was melted. In the morning it was a pleasur to walke, for we could goe without racketts. The snow was hard enough, because it freezed every night. When the sun began to shine we payed for the time past. The snow sticks so to our racketts that I believe our shoes weighed 30 pounds, which was a paine, having a burden uppon our backs besides.

We arrived, some 150 of us, men & women, to a river side, where we stayed 3 weeks making boats. Here we wanted not fish. During

that time we made feasts att a high rate. So we refreshed ourselves from our labours. In that time we tooke notice that the budds of trees began to spring, which made us to make more hast & be gone. We went up the river 8 days till we came to a nation called Pontonatenick & Matonenock; that is, the scrattchers. There we got some Indian meale & corne from those 2 nations, which lasted us till we came to the first landing Isle. There we weare well received againe. We made guifts to the Elders to encourage the yong people to bring us down to the ffrench. But mightily mistaken; ffor they would reply, "Should you bring us to be killed? The Iroquoits are every where about the river & undoubtedly will destroy us if we goe downe, & afterwards our wives & those that stayed behinde. Be wise, brethren, & offer not to goe downe this yeare to the ffrench. Lett us keepe our lives." We made many private suits, but all in vaine. That vexed us most that we had given away most of our merchandises & swapped a great deale for Castors [beavers]. Moreover they made no great harvest, being but newly there. Beside, they weare no great huntsmen. Our journey was broaken till the next yeare, & must per force.

That summer I went a hunting, & my brother stayed where he was welcome & putt up a great deale of Indian corne that was given him. He intended to furnish the wildmen that weare to goe downe to the ffrench if they had not enough. The wildmen did not perceive this; ffor if they wanted any, we could hardly kept it for our use. The winter passes away in good correspondence one with another, & sent ambassadors to the nations that uses to goe downe to the ffrench, which rejoiced them the more & made us passe that yeare with a greater pleasur, saving that my brother fell into the falling sicknesse, & many weare sorry for it. That proceeded onely of a long stay in a newly discovered country, & the idlenesse contributs much to it. There is nothing comparable to exercise. It is the onely remedy of such diseases. After he languished awhile God gave him his health againe.

PUBLIC COUNCIL IN THE EARLY SUMMER OF 1656.

During the next spring and beginning of summer, Groseilliers and Radisson made all preparations for the long journey of their return to Lower Canada. Many of the Indians must necessarily accompany them, and their canoes will be well laden with valuable furs, mostly of the beaver or castor. But the Hurons and other Indians who must be the Frenchmen's escort and retinue are still faint-hearted, dreading ambuscade and attack on their way by the fierce Iroquois who had so recently

devastated all the Huron country. The earnest arguments of Groseilliers seem insufficient, until Radisson by a bold assertion that he will start alone, at the same time suiting the action to the word, turns the tide of the council to approve and authorize the dangerous journey. Radisson narrates this in picturesquely graphic and dramatic style, bringing this great council very clearly before us, as follows:

The desire that every one had to goe down to the ffrench made them earnestly looke out for castors. They have not so many there as in the north part, so in the beginning of spring many came to our Isle. There weare no lesse, I believe, then 500 men that weare willing to venter themselves. The corne that my brother kept did us a world of service. The wildmen brought a quantity of flesh salted in a vesell. When we weare ready to depart, heere comes strang news of the defeat of the hurrons, which news, I thought, would putt off the voyage. There was a councell held, & most of them weare against the goeing downe to the ffrench, saying that the Iroquoits weare to barre this yeare, & the best way was to stay till the following yeare. And now the enemy, seeing himselfe frustrated of his expectation, would not stay longer, thinking thereby that we weare resolved nevermore to go downe, and that next yeare there should be a bigger company, & better able to oppose an ennemy. My brother and I, seeing ourselves all out of hopes of our voyage, without our corne, which was allready bestowed, & without. any merchandise, or scarce having one knife betwixt us both, so we weare in a great apprehension least that the hurrons should, as they have done often, when the ffathers weare in their country, kill a frenchman.

Seeing the equipage ready & many more that thought long to depart thence for marchandise, we uppon this resolved to call a publique councell in the place; which the Elders hearing, came and advised us not to undertake it, giving many faire words, saying, "Brethren, why are you such ennemys to yourselves to putt yourselves in the hands of those that wait for you? They will destroy you and carry you away captives. Will you have your brethren destroyed that loves you, being slained? Who then will come up and baptize our children? Stay till the next yeare, & then you are like to have the number of 600 men in company with you. Then you may freely goe without intermission. Yee shall take the church along with you, & the ffathers & mothers will send their children to be taught in the way of truth of the Lord." Our answer was that we would speake in publique, which granted, the day appointed is come. There gathered above 800 men to see who should have the glorie in a round. They satt downe on the ground. We desired silence. The elders being in the midle & we in

their midle, my brother began to speake. "Who am I? Am I a foe or a friend? If I am a foe, why did you suffer me to live so long among you? If I am a friend, & if you take so to be, hearken to what I shall say. You know, my uncles & Brethren, that I hazarded my life goeing up with you; if I have no courage, why did you not tell me att my first coming here? & if you have more witt then we, why did you not use it by preserving your knives, your hattchetts, & your gunns, that you had from the ffrench? You will see if the ennemy will sett upon you that you will be attraped like castors in a trape; how will you defend yourselves like men that is not courageous to lett yourselves be catched like beasts? How will you defend villages? with castors' skins? how will you defend your wives & children from the ennemy's hands?"

Then my brother made me stand up, saying, "Shew them the way to make warrs if they are able to uphold it." I tooke a gowne of castors' skins that one of them had uppon his shoulder & did beat him with it. I asked the others if I was a souldier. "Those are the armes that kill, & not your robes. What will your ennemy say when you perish without defending yourselves? Doe not you know the ffrench way? We are used to fight with armes & not with robes. You say that the Iroquoits waits for you because some of your men weare killed. It is onely to make you stay untill you are quite out of stocke, that they dispatch you with ease. Doe you think that the ffrench will come up here when the greatest part of you is slained by your owne fault? You know that they cannot come up without you. Shall they come to baptize your dead? Shall your children learne to be slaves among the Iroquoits for their ffathers' cowardnesse? You call me Iroquoit. Have not you seene me disposing my life with you? Who has given you your life if not the ffrench? Now you will not venter because many of your confederates are come to visit you & venter their lives with you. If you will deceave them you must not think that they will come an other time for shy words nor desire. You have spoaken of it first, doe what you will. For myne owne part, I will venter choosing to die like a man then live like a beggar. Having not wherewithall to defend myselfe, farewell; I have my sack of corne ready. Take all my castors. I shall live without you." & then departed that company.

They weare amazed of our proceeding; they stayed long before they spoake one to another. Att last sent us some considerable persons who bid us cheare up. "We see that you are in the right; the voyage is not broaken. The yong people tooke very ill that you have beaten them with the skin. All avowed to die like men & undertake the journey. You shall heare what the councell will ordaine the morrow. They are to meet privatly & you shall be called to it. Cheare up & speake as you have done; that is my councell to you.

For this you will remember me when you will see me in your country; ffor I will venter myselfe with you." Now we are more satisfied then the day before. We weare to use all rhetorique to persuade them to goe down, ffor we saw the country languish very much, ffor they could not subsist, & moreover they weare afraid of us. The councell is called, but we had no need to make a speech, finding them disposed to make the voyage & to submitt. "Yee women gett your husbands' bundles ready. They goe to gett wherewithall to defend themselves & you alive."

What a scene was that great public council for a poet or painter, to depict Groseilliers and Radisson pleading before eight hundred Indians! It is a day in the middle or later part of June. On each side, some two miles away, rise the wooded bluffs that inclose the valley and its islands. In a beautiful prairie area the motley crowd of savages are sitting or lying on the ground. At the center of the assemblage these two courageous Frenchmen are striving to persuade their dusky auditors to set out on the first commercial venture connecting this region with civilzation.

THE RETURN TO QUEBEC.

As Groseilliers and Radisson now leave the area of Minnesota, we will give only a short account of their further fortunes until they again arrive in our northwestern country. The following narrative of Radisson is very brief for the first two-thirds of the journey, until they have passed beyond Lake Nipissing.

Our equipage was ready in 6 dayes. We embarked ourselves. We weare in number about 500, all stout men. We had with us a great store of castors' skins. We came to the South. We now goe back to the north, because to overtake a band of men that went before to give notice to others. We passed the lake without dangers. We wanted nothing, having good store of corne & netts to catch fish, which is plentyfull in the rivers. We came to a place where 8 Iroquoits wintered. That was the company that made a slaughter before our departure from home. Our men repented now they did not goe sooner, ffor it might be they should have surprised them. Att last we are out of those lakes.

On the lower Ottawa river, after passing the Calumet rapids, the voyageurs were harassed by small parties of the Iroquois, who endeavored to bar their advance but were defeated. In speaking of one of their encounters, against "16 boats of our ennemy," Radisson enumerates the Indian tribes represented in his company, as follows.

* * * We begin to make outcryes & sing. The hurrons in one side, the Algonquins att the other side, the Ottanak [Ottawas], the panoestigons [Saulteurs, Ojibways], the Amickkoick [Beaver Indians], the Nadonicenago [Sinagoes, an Ottawa band], the ticacon [probably Tatarga, the Prairie Sioux], and we both encouraged them all, crying out with a loud noise.

After the latest encounter with the Iroquois, in running rapids of "that swift streame * * * the bad lacke was," says Radisson, "that where my brother was the boat [over]turned in the torrent, being seaven of them together, weare in great danger, ffor God was mercifull to give them strength to save themselves. * * * My brother lost his booke of annotations of the last yeare of our being in these foraigne nations. We lost never a castor, but may be some better thing. It's better [that one] loose all then lose his life." The place of this misfortune, as we learn in the description of the return from the second western expedition, was the Long Sault of the Ottawa, a series of rapids extending nearly six miles next below Grenville, about halfway between Ottawa and Montreal. Many times will Minnesota historians regret that the diary of Groseilliers at Prairie island was thus lost! Instead, we have only what Radisson remembered and wrote for his English patrons about ten years afterward.

The arrival of this company, with their large stock of furs, brought great rejoicing to the French settlements, which had languished, on account of the failure of the fur trade, since 1649-50, when the Hurons, with whom principally this trade existed, were mostly killed, and the others driven from their country, by the Iroquois and by famine following their cruel warfare. Radisson wrote:

* * * I give you leave if those of mont Royall weare not overjoyed to see us arrived where they affirme us the pitiful conditions that the country was by the cruelty of these cruell barbars, that perpetually killed & slaughtered to the very gate of the ffrench fort * * * We came to Quebecq, where we are saluted with the thundring of the guns & batteryes of the fort, and of the 3 shipps that weare then at anchor, which had gon back to france without castors if we had not come. We weare well traited for 5 dayes. The Governor made gifts & sent 2 Brigantins to bring us to the 3 rivers. * * *

ACCOUNT IN THE JESUIT RELATION OF 1655-56.

The parallel narration of this expedition in the Jesuit Relation of 1655-56 supplies some very interesting and important additional details:

On the sixth day of August, 1654, two young Frenchmen, full of courage, having received permission from Monsieur the Governor of the Country to embark with some of the Peoples who had come to our French settlements, began a journey of more than five hundred leagues under the guidance of these Argonauts,—conveyed, not in great Galleons or large oared Barges, but in little Gondolas of bark. The two Pilgrims fully expected to return in the Spring of 1655, but those Peoples did not conduct them home until toward the end of August of this year, 1656. Their arrival caused the Country universal joy, for they were accompanied by fifty canoes, laden with goods which the French come to this end of the world to procure. The fleet rode in state and in fine order along our mighty river, propelled by five hundred arms, and guided by as many eyes, most of which had never seen the great wooden canoes of the French,—that is to say, their Ships.

Having landed, amid the stunning noise of Cannon, and having quickly built their temporary dwellings, the Captains ascended to Fort saint Louys to salute Monsieur our Governor, bearing their speeches in their hands. These were two presents, which represent words among these Peoples. One of the two gifts asked for some Frenchmen, to go and pass the Winter in their Country; while the other made request for some Fathers of our Society, to teach all the Nations of those vast Regions the way to Heaven. They were answered, in their own way, by presents, and were very willingly granted all that they asked. But, while those assigned to this great undertaking are making their preparations, let us learn some news from the two French Pilgrims and from their hosts.

* * * We were told of many Nations surrounding the Nation of the Sea [the Winnebagoes] which some have called "the Stinkards,"

because its people formerly lived on the shores of the Sea, which they call Ouinipeg, that is, "stinking water." The Liniouek [Illinois], their neighbors, comprise about sixty Villages; the Nadouesiouek [Sioux] have fully forty; the Pouarak [Assiniboines], at least thirty; and the Kiristinons [Crees] surpass all the above in extent, reaching as far as the North Sea. The Country of the Hurons, which had only seventeen Villages, extending over about as many leagues, maintained fully thirty thousand people.

* * * These two young men have not undergone hardships for naught in their long journey. Not only have they enriched some Frenchmen upon their return, but they also caused great joy in all Paradise, during their travels, by Baptizing and sending to Heaven about three hundred little children, who began to know, love, and possess God, as soon as they were washed in his blood through the waters of Baptism. They awakened in the minds of those Peoples the remembrance of the beauties of our Faith, whereof they had acquired the first tincture in the Country of the Hurons, when they visited our Fathers living there, or when some of us approached the Regions bordering on their Country.

The Indians in the council at Prairie island, and also Radisson in his speech there, mentioned the baptism of children; and we may readily believe that it was done by Groseilliers, who during the years 1641-46 had been a lay helper of the Jesuits in their very successful Huron missions. If the "booke of annotations" by Groseilliers had not been lost, as before related, we should doubtless have therein many further details of the year spent on Prairie island.

In comparing the tribal names given by Radisson with those in the Jesuit Relation, it is noticeable that the latter is more explicit, containing definite information of the Illinois, Sioux, Assiniboines, and Crees, who were either unknown or less fully known to Radisson, so far as appears in his narration. For these tribes the Jesuit writer probably obtained information, as the Relation itself indicates, from some of the Indians in the company that came with Groseilliers and Radisson, learning more perhaps than these French traders knew. Their retinue doubtless included Indians who had traveled far beyond their own tribal areas, and who might inform the Jesuits concerning the distant southern and northern Indians.

The tribes and bands enumerated by Radisson, excepting probably "the ticacon," had been driven from their former homes around Lake Huron and at the Sault Ste. Marie, and were doubtless each represented in the large company of refugees, called by Perrot the Hurons and Ottawas, who, as he related, fled to the Mississippi river and settled temporarily on Prairie island and in its vicinity. Before their coming to this upper part of the Mississippi, they had visited "the great Nation of the Alimiwec" [Liniouek, Illinois], the populous Algonquian tribe of sixty villages on the Illinois and Mississippi rivers.

When it is remembered that our Frenchmen spent more than a year at Prairie island, and that they had "good correspondence" and "sent ambassadors to the nations that use to go down to the French," it appears possible that there were also some who then went for the first time, representatives of the Illinois, and of the Sioux, Assiniboines, and Crees, coming long distances, respectively, from the south, west, and north, bringing their furs, and joining the retinue of these traders, escorted by the Hurons and Ottawas, in the long trip east of about two thousand miles.

It required probably about seven weeks to go from Prairie island to Lower Canada; and a longer time was used in going back, propelling the canoes against the current of the Ottawa and Mattawa rivers, along the shores of Georgian bay, Lakes Huron and Michigan, and Green Bay, and through the Fox and Wisconsin rivers, to the Mississippi and the vast western prairies.

Why were not the names of Groseilliers and Radisson given in the Jesuit Relations? Much is told of their expeditions by these missionary reports for 1656 and 1660; but their names, though surely well known to the Jesuit writer, are not stated. We may conjecture that the writer had some distrust of their continuing in loyalty to the church or to the government. On their part, the brothers-in-law concealed, as much as they could, the discoveries that they had made, because, as Radisson says, their chief purpose, to reach "the bay of the north," had not been attained. They eagerly looked forward to another expedition.

RADISSON'S EXCURSIONS IN THE SUMMER OF 1655.

Here we may conveniently ask, Among what tribes, and how far from Prairie island, did Radisson go in his hunting excursions with the savages in the summer while Groseilliers was raising corn? The account of his wanderings that summer is given after the main narration of the expedition and its return, and is as follows:

We weare 4 moneths in our voyage without doeing anything but goe from river to river. We mett severall sorts of people. We conversed with them, being long time in alliance with them. By the persuasion of som of them we went into the great river that divides itselfe in 2, where the hurrons with some Ottanake & the wildmen that had warrs with them had retired. There is not great difference in their language, as we weare told. This nation have warrs against those of [the] forked river. It is so called because it has 2 branches, the one towards the west, the other towards the South, which we believe runns towards Mexico, by the tokens they gave us. Being among these people, they told us the prisoners they take tells them that they have warrs against a nation, against men that build great cabbans & have great beards & had such knives as we had. Moreover they shewed a Decad of beads & guilded pearls that they have had from that people, which made us believe they weare Europeans. They shewed one of that nation that was taken the yeare before. We understood him not; he was much more tawny than they with whome we weare. His arms and leggs weare turned outside; that was the punishment inflicted uppon him. So they doe with them that they take, & kill them with clubbs & doe often eat them. They doe not burne their prisoners as those of the northern parts.

We weare informed of that nation that live in the other river. These weare men of extraordinary height & bignesse, that made us believe they had no communication with them. They live onely uppon Corne & Citrulles [pumpkins], which are mighty bigg. They have fish in plenty throughout the yeare. They have fruit as big as the heart of an Oriniak, which grows on vast trees which in compasse are three armefull in compasse. When they see litle men they are afraid & cry out, which makes many come help them. Their arrows are not of stones as ours are, but of fish boans & other boans that they worke greatly, as all other things. Their dishes are made of wood. I having seene them, could not but admire the curiosity of their worke. They have great calumetts of great stones, red & greene. They make a store

of tobacco. They have a kind of drink that makes them mad for a whole day. This I have not seene, therefore you may believe as you please.

When I came backe I found my brother sick, as I said before. God gave him his health, more by his courage then by any good medicine, ffor our bodyes are not like those of the wildmen. * * *

It is evident, from this account, that Radisson and his companions went southeastward and hunted on the east side of the Mississippi, going by portages from one river to another until they reached the Illinois, "the great river that divides itself in two," so called apparently because it is formed by the junction of the Des Plaines and the Kankakee, each an important canoe route. The Jesuit Relation of 1659-60 informs us that the Hurons and Ottawas retreated thither and were kindly received by the Illinois tribe, from whom then, and during Radisson's hunting trip, might be learned all that he narrates of the "forked river" and the people there and beyond. We should accordingly identify the "forked river" as the Mississippi, running on "towards Mexico" after receiving the great Missouri, the route of many aboriginal canoe expeditions "towards the west." But Groseilliers and Radisson were quite unaware that their own river at Prairie island is the main eastern stream of their "forked river," being, in its farther course and as to the area of its basin, the largest of North America.

Radisson recorded what he gathered from the Indians of the Illinois river concerning those on the Missouri and farther south and southwest. Indeed, according to his own narrative of his captivity among the Iroquois, he had there heard several years previously (from an Iroquois who had ranged far and wide in the west, to the same "river that divides itself in two") a part of the information that he gives as learned in this expedition, of gigantic men, and of trees that bear fruit as big as the heart of an elk, thought by the late Captain Blakeley to refer to pine cones with edible nutlike seeds, which are used as food in Mexico and California. For a full consideration of what Radisson thus learned and wrote of the Missouri and the far southwest, the reader may profitably consult the paper by

Captain Blakeley in the eighth volume of the Minnesota Historical Society Collections.

It need not cause surprise that Radisson learned much concerning regions far beyond the limits of his own travels, and that he was thereby tempted to add a false year in each of the expeditions to the west, telling what he heard from the Indians as if it was actually seen by himself. He first learned of the Illinois river and of the country beyond while he was a captive in the region of central New York. Later he claimed to have gone to the Gulf of Mexico, though probably never nearer to it than central Illinois; and, last of all, he claimed to have traveled from the west part of Lake Superior to Hudson bay, though probably not advancing so far north as to the northern boundary of Minnesota.

NARRATIVE OF THE SECOND WESTERN EXPEDITION.

After returning from the west in August, 1656, Groseilliers and Radisson took a period of rest. This was succeeded by Radisson's expedition with others, Indians and French, to the Onondaga country, which he places as his "second voyage." From this absence he returned about the end of March, 1658. Afterward, in the latter part of the summer of this year or of the next year, 1659, the two brothers-in-law, and a party of returning Indians, again started for the farthest west, with a stock of merchandise suited for barter in their fur trading.

The narrative by Radisson very explicitly relates their travels and experiences for two years, which would require their departure to have been in 1658; for the date of their return, known with certainty from several concurring records, was in August, 1660. But the Relation and Journal of the Jesuits both indicate that this expedition occupied only one year. Scrutinizing the narrative, with this discrepancy in mind, I am fully, though reluctantly, persuaded that here again Radisson was guilty in his writing, as for the preceding western expedition, of fictitiously adding a year, this being from the first spring to the second in his narration, comprising the visit to Hudson bay.

The numerous reasons for this conclusion will appear as we proceed. It is therefore to be understood that the beginning of this expedition was in August, 1659, soon after a "company of the Sault" (Ojibways) arrived at Three Rivers.

Aillebout, the governor of Quebec, who in 1656 welcomed and honored these traders because their enterprise had given new courage to the colony, was succeeded in the summer of 1658 by Argenson, who held the office three years. He treated Groseilliers and Radisson with injustice as to the terms for granting to them the requisite official permission or license for this expedition. Not daunted, however, they departed at night, disregarding the governor's special prohibition, but bearing the good wishes of the people and garrison of Three Rivers, voiced by the sentry, "God give you a good voyage."

The journey up the Ottawa river was enlivened by skirmishes with Iroquois rangers, some being killed on each side, which Radisson relates in his fervid style, with many details of the wary Indian warfare. After twenty-two days of frequent danger, hardship and hunger, the canoe flotilla entered Georgian bay of Lake Huron. Radisson says: "Our equipage and we weare ready to wander uppon that sweet sea; but most of that coast is void of wild beasts, so there was great famine amongst us for want. Yett the coast afforded us some small fruits. There I found the kindnesse & charity of the wildmen, ffor when they found any place of any quantity of it [blueberries] they called me and my brother to eat and replenish our bellys, showing themselves far gratfuller then many Christians even to their owne relations."

Coasting northwestward, they soon came to St. Mary's river and falls, still commonly known by the ancient French name Sault Ste. Marie, outflowing from Lake Superior. It appears in Radisson's speaking of the whitefish, that Groseilliers and himself had never come there previously; but in the first winter of the first western expedition they had probably visited the Saulteurs (Ojibways) on the south side of Lake Superior in the vicinity of Au Train river and bay, due north of Green bay and a hundred and twenty-five miles west of the Sault. Exactly

twenty-five years had passed since Jean Nicolet, with his seven Huron canoemen, came to the Sault in the autumn of 1634, being the first of Europeans to look on the greatest of our inland freshwater seas. Groseilliers and Radisson were now the first white men to navigate its length and to travel beyond among the tribes of northern Wisconsin and northern Minnesota.

Ojibways were the escort of the French traders and of the Indians from other tribes in this expedition. They had formerly lived at the Sault, and hence were called by the French the Saulteurs; but they had been driven away westward by the raids of the Iroquois, so that at this time the region was desolate without inhabitants. The narrative of the arrival and short stay at St. Mary's Falls is as follows:

Afterwardes we entered into a straight which had 10 leagues in length, full of islands, where we wanted not fish. We came after to a rapid that makes the separation of the lake of the hurrons, that we calle Superior, or upper, for that the wildmen hold it to be longer & broader, besids a great many islands, which maks appear in a bigger extent. This rapid was formerly the dwelling of those with whome wee weare, and consequently we must not aske them if they knew where they have layed. Wee made cottages att our advantages, and found the truth of what those men had often [said], that if once we could come to that place we should make good cheare of a fish that they call Assickmack, which signifieth a whitefish. The beare, the castors, and the Oriniack shewed themselves often, but to their cost; indeed it was to us like a terrestriall paradise. After so long fastning, after so great paines that we had taken, finde ourselves so well by choosing our dyet, and resting when we had a minde to it, 't is here that we must tast with pleasuf a sweet bitt. We doe not aske for a good sauce; it's better to have it naturally; it is the way to distinguish the sweet from the bitter.

But the season was far spent, and use diligence and leave that place so wished, which wee shall bewaile, to the coursed Iroquoits. * * * We left that inn without reckoning with our host. It is cheape when wee are not to put the hand to the purse; neverthelesse we must pay out of civility; the one gives thanks to the woods, the other to the river, the third to the earth, the other to the rocks that stayes the fish. * * *

As the voyageurs advanced along the south shore of Lake Superior, Radisson saw and well remembered all the chief geogra-

phic features. Of the high sand dunes in the vicinity of the Point Au Sable, nearly a hundred miles from the Sault, he says:

* * * We saw banckes of sand so high that one of our wildmen went upp for curiositie; being there, did shew no more then a crow. That place is most dangerous when that there is any storme, being no landing place so long as the sandy bancks are under water; and when the wind blowes, that sand doth rise by a strang kind of whirling that are able to choake the passengers. One day you will see 50 small mountaines att one side, and the next day, if the wind changes, on the other side. * * *

About fifteen miles farther on, southwestward from the Point Au Sable are the Grand Portal, or Arched Rock, and other waterworn cliffs, well described in the narrative.

After this we came to a remarquable place. It's a banke of Rocks that the wildmen make a sacrifice to; they calls it Nanitoucksinagoit, which signifies the likenesse of the devill. They fling much tobacco and other things in its veneration. It is a thing most incredible that that lake should be so boisterous, that the waves of it should have the strength to doe what I have to say by this my discours; first, that it's so high and soe deepe that it's impossible to claime up to the point. There comes many sorte of birds that makes there nest here, the goilants, which is a white sea-bird of the bignesse of pigeon, which makes me believe what the wildmen told me concerning the sea to be neare directly to the point. It's like a great Portall, by reason of the beating of the waves. The lower part of that oppening is as bigg as a tower, and grows bigger in the going up. There is, I believe, 6 acres of land above it. A shipp of 500 tuns could passe by, soe bigg is the arch. I gave it the name of the portall of St. Peter, because my name is so called, and that I was the first Christian that ever saw it. There is in that place caves very deepe, caused by the same violence. We must looke to ourselves, and take time with our small boats. The coast of rocks is 5 or 6 leagues, and there scarce a place to putt a boat in assurance from the waves. When the lake is agitated the waves goeth in these concavities with force and make a most horrible noise, most like the shooting of great guns.

Radisson continues with description of the passage across the base of the Keweenaw peninsula, which projects fifty miles northeasterly into the lake.

Some dayes afterwards we arrived to a very beautifull point of sand where there are 3 beautifull islands, that we called of the Trinity [now called Huron islands]; there be 3 in triangle. From this place

we discovered a bay very deepe [Keweenaw bay], where a river empties it selfe with a noise for the quantitie & dept of the water. We must stay there 3 dayes to wait for faire weather to make the Trainage, which was about 6 leagues wide. Soe done, we came to the mouth of a small river, where we killed some Oriniacks. We found meddows that weare squared, and 10 leagues as smooth as a board. We went up some 5 leagues further, where we found some pools made by the castors. We must breake them that we might passe. The sluce being broaken, what a wonderfull thing to see the industrie of that animal, which had drowned more then 20 leagues in the grounds, and cutt all the trees, having left non to make a fire if the countrey should be dried up. Being come to the height, we must dragne our boats over a trembling ground for the space of an houre. * * *

Having passed that place, we made a carriage through the land for 2 leagues. The way was well beaten because of the commers and goers, who by making that passage shortens their passage by 8 dayes by tourning about the point that goes very farr in that great lake, that is to say, 5 to come to the point, and 3 for to come to the landing of that place of carriage. In the end of that point, that goeth very farre, there is an isle, as I was told, all of copper. This I have not seene. They say that from the isle in a faire and calme wether, beginning from sun rising to sun sett, they come to a great island [Isle Royale], from whence they come the next morning to firme land att the other side; so by reason of 20 leagues a day that lake should be broad of 6 score and 10 leagues. The wildmen doe not much lesse when the weather is fine.

Isle Royale is plainly visible from the high Keweenaw peninsula; and it soon came into full view to the toiling Indians in their canoes. The distance is only forty-five or fifty miles, and was passed over without difficulty in the fifteen hours, more or less, of a long summer day. What Radisson meant in computing the distance of 130 leagues is not evident. Twenty leagues, which he estimates for one day's canoeing, from Keweenaw point to Isle Royale, are fifty-five miles, the common league of France being 2.76 English miles. Parties of Ojibways were accustomed, as he says, to make this passage across the lake, but only in favorable weather and to accomplish it in a single day, lest in a cloudy day or by night they should miss the right course, or lest in storms their light birch bark canoes should be swamped by big waves. Nor need we doubt even that the Crees, in their smaller canoes, could do the same, for they

crossed from the Bayfield peninsula to the north shore near the present town of Two Harbors, as narrated later, which is half as far.

After five days of canoeing beyond the Keweenaw portage, Groseilliers and Radisson, with their company of Ojibways, Hurons and Ottawas, came to a camp of Crees on the lake shore, who gladly welcomed them on account of their French merchandise. Somewhat farther on, at the Montreal river, many of the company, apparenty Ojibways, turned their canoes up that river, leaving, however, a large flotilla to continue westward along the lake coast. Half a day's journey then brought the French traders, with their Indian escort and retinue of the various tribes, to Chequamegon bay, which became their base for departure inland and for return after their winter travels and trade.

FORT AT CHEQUAMEGON BAY.

Resuming the narrative at the Montreal river, we learn soon of the earliest dwelling built by white men on the shores of Lake Superior, a rude palisade, with a covering of boughs. The narrative runs thus:

* * * Many of our wildmen went to win the shortest way to their nation, and weare then 3 and 20 boats, for we mett with some in that lake that joyned with us, and came to keepe us company, in hopes to gett knives from us, which they love better then we serve God, which should make us blush for shame. Seaven boats stayed of the nation of the Sault. We went on half a day before we could come to the landing place, and wear forced to make another carriage a point of 2 leagues long and some 60 paces broad. As we came to the other sid we weare in a bay of 10 leagues about, if we had gone in. By goeing about that same point we passed a straight, for that point was very nigh the other side, which is a cape very much elevated like piramides. That point should be very fitt to build & advantageous for the building of a fort, as we did the spring following. In that bay there is a chanell where we take great store of fishes, sturgeons of a vast biggnesse, and Pycks of seaven foot long. Att the end of this bay we landed. The wildmen gave thanks to that which they worship, we to God of Gods, to see ourselves in a place where we must leave our navigation and forsake our boats to undertake a harder peece of worke in hand, to which we are forced. The men [Hurons returning]

told us that wee had 5 great dayes' journeys before we should arrive where their wives weare. We foresee the hard task that we weare to undergoe by carrying our bundles uppon our backs. They weare used to it. Here every one for himselfe & God for all.

We finding ourselves not able to perform such a taske, & they could not well tell where to finde their wives, fearing least the Nadoneceronons had warrs against their nation and forced them from their appointed place, my brother and I we consulted what was best to doe, and declared our will to them, which was thus: "Brethren, we resolve to stay here, being not accustomed to make any cariage on our backs as yee are wont. Goe yee and looke for your wives. We will build us a fort here. And seeing that you are not able to carry all your marchandizes att once, we will keepe them for you, and will stay for you 14 dayes. Before the time expired you will send to us if your wives be alive, and if you find them they will fetch what you leave here & what we have; ffor their paines they shall receive guifts of us. Soe you will see us in your countrey. If they be dead, we will spend all to be revenged, and will gather up the whole countrey for the next spring, for that purpose to destroy those that weare the causers of their death, and you shall see our strenght and vallour. Although there are seaven thousand fighting men in one village, you'll see we will make them runne away, & you shall kill them to your best liking by the very noise of our armes and our presence, who are the Gods of the earth among those people."

They woundered very much att our resolution. The next day they went their way and we stay for our assurance in the midst of many nations, being but two almost starved for want of food. We went about to make a fort of stakes, which was in this manner. Suppose that the watter side had ben in one end; att the same end there should be murtherers, and att need we made a bastion in a triangle to defend us from assault. The doore was neare the watter side, our fire was in the midle, and our bed on the right hand, covered. There weare boughs of trees all about our fort layed a crosse, one uppon an other. Besides these boughs we had a long cord tyed with some small bells, which weare senteryes. Finally, we made an end of that fort in 2 dayes' time. We made end of some fish that we putt by for neede. But as soone as we are lodged we went to fish for more whilst the other kept the house. I was the fittest to goe out, being yongest. I tooke my gunne and goes where I never was before, so I choosed not one way before another. I went to the woods some 3 or 4 miles. I find a small brooke, where I walked by the sid awhile, which brought me into meddowes. There was a poole where weare a good store of bustards. I began to creepe though I might come neare. Thought to be in Canada, where the fowle is scared away; but the poor creatures, seeing me flatt uppon the ground, thought I was a

beast as well as they, so they came neare me, whistling like gosslings, thinking to frighten me. The whistling that I made them heare was another musick then theirs. There I killed 3 and the rest scared, which neverthelesse came to that place againe to see what sudain sicknesse befeled their comrads. I shott againe; two payed for their curiositie. * * *

There we stayed still full 12 dayes without any news, but we had the company of other wildmen of other countreys that came to us admiring our fort and the workmanshipp. We suffered non to goe in but one person, and liked it so much the better, & often durst not goe in, so much they stood in feare of our armes, that weare in good order, which weare 5 guns, two musquetons, 3 fowling-pieces, 3 paire of great pistoletts, and 2 paire of pockett ons, and every one his sword and daggar. So that we might say that a Coward was not well enough armed. * * *

The 12th day we perceived afarr off some 50 yong men coming towards us, with some of our formest compagnions. We gave them leave to come into our fort, but they are astonied, calling us every foot devills to have made such a machine. They brought us victualls, thinking we weare half starved, but weare mightily mistaken, for we had more for them then they weare able to eate, having 3 score bustards and many sticks where was meate hanged plentifully. They offered to carry our baggage, being come a purpose; but we had not so much marchandize as when they went from us, because we hid some of them, that they might not have suspicion of us. We told them that for feare of the dayly multitud of people that came to see us, for to have our goods, would kill us. We therefore tooke a boat and putt into it our marchandises; this we brought farre into the bay, where we sunke them, biding our devill not to lett them to be wett nor rusted, nor suffer them to be taken away, which he promised faithlesse that we should retourne and take them out of his hands; att which they weare astonished, believing it to be true as the Christians the Gospell. We hid them in the ground on the other sid of the river in a peece of ground. We told them that lye that they should not have suspicion of us. * * * We weare Cesars, being nobody to contradict us. We went away free from any burden, whilst those poore miserable thought themselves happy to carry our Equipage, for the hope that they had that we should give them a brasse ring, or an awle, or an needle.

There came above foure hundred persons to see us goe away from that place, which admired more our actions [than] the fools of Paris to see enter their King and the Infanta of Spaine, his spouse; for they cry out, "God save the King and Queene!" Those make horrid noise, and called Gods and Devills of the Earth and heavens. We marched foure dayes through the woods. The countrey is beautifull, with very

few mountaines, the woods cleare. Att last we came within a league of the Cabbans, where we layed that the next day might be for our entrey. We 2 poore adventurers for the honour of our countrey, or of those that shall deserve it from that day; the nimblest and stoutest went before to warne before the people that we should make our entry to-morrow. Every one prepares to see what they never before have seene. We weare in cottages which weare neare a litle lake some 8 leagues in circuit. Att the watterside there weare abundance of litle boats made of trees that they have hollowed, and of rind.

This lake is thought by Father Chrysostom Verwyst to be Lac Courte Oreille, one of the northwestern sources of the Chippewa river in northern Wisconsin, nearly sixty miles south-southwest of Chequamegon bay. It is still called Ottawa lake by the Ojibways, who have a tradition that very long ago Ottawas died there of starvation. The tradition has probably been passed along two centuries and a half, from the terrible winter of 1659-60, to be described by Radisson, when these explorers and the Indians of this region suffered for several weeks a frightful famine.

The narrative, referring still to the "litle boats," continues:

The next day we weare to embarque in them, and arrived att the village by watter, which was composed of a hundred cabans without pallasados. There is nothing but cryes. * * * We destinated 3 presents, one for the men, one for the women, and the other for the children, to the end that they should remember that journey; that we should be spoaken of a hundred years after, if other Europeans should not come in those quarters and be liberal to them, which will hardly come to passe. * * * The third guift was of brasse rings, of small bells, and rasades of divers coulours, and given in this maner. We sent a man to make all the children come together. When they weare there we throw these things over their heads. You would admire what a beat was among them, every one striving to have the best. This was done uppon this consideration, that they should be allwayes under our protection, giving them wherewithall to make them merry & remember us when they should be men.

This done, we are called to the Councell of welcome and to the feast of ffriendshipp, afterwards to the dancing of the heads; but before the dancing we must mourne for the deceased, and then, for to forgett all sorrow, to the dance. We gave them foure small guifts that they should continue such ceremonyes, which they tooke willingly and did us good, that gave us authority among the whole nation. We

knewed their councels, and made them doe whatsoever we thought best. This was a great advantage for us, you must think. Amongst such a rowish kind of people a guift is much, and well bestowed, and liberality much esteemed; but not prodigalitie is not in esteeme, for they abuse it, being brutish. Wee have ben useing such ceremonyes 3 whole dayes, & weare lodged in the cabban of the chiefest captayne, who came with us from the ffrench. We liked not the company of that blind, therefore left him. He wondred at this, but durst not speake, because we weare demi-gods. We came to the cottage of an ancient witty man, that had had a great familie and many children, his wife old, neverthelesse handsome. They weare of a nation called Malhonmines; that is, the nation of Oats, graine that is much in that countrey. Of this afterwards more att large. I tooke this man for my ffather and the woman for my mother, soe the children consequently brothers and sisters. They adopted me. I gave every one a guift, and they to mee.

STARVATION IN WINTER.

Large numbers of the Huron and Ottawa exiles, flying before the Iroquois and seeking refuge first in the country of the Illinois and later on Prairie island, had, within the three years since the first western expedition of Groseilliers and Radisson, been driven from that island by new enemies, the fierce Sioux of the neighboring forest and prairie country on the north and west, and had again removed, following the Chippewa river of Wisconsin to its sources, or, more probably, coming there by the equally direct route of the St. Croix river. Perrot, in his Memoir, states that the Hurons and Ottawas, after leaving Prairie island went up the Black river to its source, and that there the Hurons established for themselves a fortified village, while the Ottawas advanced to Chequamegon bay. Perhaps the Black river was the route of the Ottawas; but the Hurons appear to have taken a northward course from Prairie island, ascending the St. Croix. Radisson's narrative certainly shows that the main settlement of the Hurons in 1659 was considerably north of the source of Black river, being instead on the headwaters of the Chippewa, according to Father Verwyst, in the vicinity of Lac Courte Oreille and the numerous other lakes south and east of Hayward in Sawyer county, Wisconsin. The

acquaintance of the Hurons with a proposed rendezvous in the country of the Sioux, west of the St. Croix, implies that in their journeying northward many of their people had seen the place which was thus selected for their meeting in the midwinter. The march from Chequamegon bay, "four days through the woods," arriving at the chief Huron village on a lake "some eight leagues in circuit," agrees very well with Verwyst's identification of their locality.

In that wooded country, to which the Hurons had come so very recently, little had been done in raising corn. The poor fugitives had no Groseilliers during the preceding summer to urge the necessity of providing corn for their chief subsistence through the long, cold winter, when game and fish might be scarce. If any reader has thought that Longfellow in the most American poem of all our literature, "The Song of Hiawatha," overdrew the horror of famine and starvation which sometimes befall the Indians in winter, let him listen to Radisson's pathetic narration.

Having so disposed of our buissinesse, the winter comes on, that warns us; the snow begins to fall, soe we must retire from the place to seeke our living in the woods. Every one getts his equipage ready. So away we goe, but not all to the same place; two, three att the most, went one way, and so of an other. They have so done because victuals weare scant for all in a place. But lett us where we will, we cannot escape the myghty hand of God, that disposes as he pleases, and who chastes us as a good & a common loving ffather, and not as our sins doe deserve. Finaly wee depart one from an other. As many as we weare in number, we are reduced to a small company. We appointed a rendezvous after two months and a half, to take a new road & an advice what we should doe. During the said terme we sent messengers everywhere, to give speciall notice to all manner of persons and nation that within 5 moons the feast of death was to be celebrated, and that we should apeare together and explaine what the devill should command us to say, and then present them presents of peace and union. Now we must live on what God sends, and warre against the bears in the meane time, for we could aime att nothing else, which was the cause that we had no great cheare. * * * We beated downe the woods dayly for to discover novelties. We killed severall other beasts, as Oriniacks, staggs, wild cows, Carriboucks, fallow does and bucks, Catts of mountains, child of the Devill; in a word, we lead

a good life. The snow increases dayly. There we make raketts, not to play att ball, but to exercise ourselves in a game harder and more necessary. They are broad, made like racketts, that they may goe in the snow and not sinke when they runne after the eland or other beast.

We are come to the small lake, the place of rendezvous, where we found some company that weare there before us. We cottage ourselves, staying for the rest, that come every day. We stayed 14 dayes in this place most miserable, like to a churchyard; ffor there did fall such a quantity of snow and frost, and with such a thick mist, that all the snow stoocke to these trees that are there so ruffe, being deal trees, prusse cedars, and thorns, that caused that darknesse uppon the earth that it is to be believed that the sun was eclipsed them 2 months; ffor after the trees weare so laden with snow that fel'd afterwards, was as if it had been sifted, so by that means very light and not able to beare us, albeit we made racketts of 6 foot long and a foot and a halfe broad; so often thinking to tourne ourselves we felld over and over againe in the snow, and if we weare alone we should have difficultie enough to rise againe. By the noyse we made, the Beasts heard us a great way off; so the famine was among great many that had not provided before hand, and live upon what they gett that day, never thinking for the next. It grows wors and wors dayly.

To augment our misery we receive news of the Octanaks, who weare about a hundred and fifty, with their families. They had a quarrell with the hurrons in the Isle where we had come from some years before in the lake of the stairing hairs [Bois Blanc island, as identified by Campbell, in lake Huron], and came purposely to make warres against them the next summer. But lett us see if they brought us anything to subsist withall. But are worst provided then we; having no huntsmen, they are reduced to famine. But, O cursed covetousnesse, what art thou going to doe? It should be farr better to see a company of Rogues perish then see ourselves in danger to perish by that scourg so cruell. Hearing that they have had knives and hattchetts, the victualls of their poore children is taken away from them; yea, whatever they have, those dogs must have their share. They are the coursedest, unablest, the unfamous & cowarliest people that I have seene amongst fower score nations that I have frequented. O yee poore people, you shall have their booty, but you shall pay dearly for it! Every one cryes out for hungar; the women become baren. and drie like wood. You men must eate the cord, being you have no more strength to make use of the bow. Children, you must die. ffrench, you called yourselves Gods of the earth, that you should be feared, for your interest; notwithstanding you shall tast of the bitternesse, and too happy if you escape. * * * Oh! if the musick that we heare could give us recreation, we wanted not any lamentable

musick nor sad spectacle. In the morning the husband looks uppon his wife, the Brother his sister, the cozen the cozen, the Oncle the nevew, that weare for the most part found deade. They languish with cryes & hideous noise that it was able to make the haire starre on the heads that have any apprehension. Good God, have mercy on so many poore innocent people, and of us that acknowledge thee, that having offended thee punishes us. But wee are not free of that cruell Executioner. Those that have any life seeketh out for roots, which could not be done without great difficultie, the earth being frozen 2 or 3 foote deepe, and the snow 5 or 6 above it. The greatest susibstance that we can have is of rind tree which growes like ivie about the trees; but to swallow it, we cutt the stick some 2 foot long, tying it in faggott, and boyle it, and when it boyles one houre or two the rind or skinne comes off with ease, which we take and drie it in the smoake and then reduce it into powder betwixt two graine-stoans, and putting the kettle with the same watter uppon the fire, we make a kind of broath, which nourished us, but becam thirstier and drier then the woode we eate.

The 2 first weeke we did eate our doggs * * * in the next place, the skins that weare reserved to make us shoose, cloath, and stokins, yea, most of the skins of our cottages, the castors' skins * * * We burned the haire on the coals; the rest goes down throats, eating heartily these things most abhorred. We went so eagerly to it that our gumms did bleede like one newly wounded. The wood was our food the rest of the sorrowfull time. Finaly we became the very Image of death. We mistook ourselves very often, taking the living for the dead and the dead for the living. We wanted strength to draw the living out of the cabans, or if we did when we could, it was to putt them four paces in the snow. Att the end the wrath of God begins to appease itselfe, and pityes his poore creatures. If I should expresse all that befell us in that strange accidents, a great volume would not containe it. Here are above 500 dead, men, women, and children. It's time to come out of such miseryes. Our bodies are not able to hold out any further.

After the storme, calme comes. But stormes favoured us, being that calme kills us. Here comes a wind and raine that putts a new life in us. The snow falls, the forest cleers itselfe, att which sight those that had strings left in their bowes takes courage to use it. The weather continued so 3 dayes that we needed no racketts more, for the snow hardened much. The small staggs are [as] if they weare stakes in it after they made 7 or 8 capers. It's an easy matter for us to take them and cutt their throats with our knives. Now we see ourselves a little fournished, but yett have not payed, ffor it cost many their lives. Our gutts became very straight by our long fasting, that they could not containe the quantity that some putt in them.

I cannot omitt the pleasant thoughts of some of them wildmen. Seeing my brother allwayes in the same condition, they said that some Devill brought him wherewithall to eate; but if they had seen his body they should be of another opinion. The beard that covered his face made as if he had not altered his face. For me that had no beard, they said I loved them, because I lived as well as they. From the second day we began to walke.

There came 2 men from a strange countrey who had a dogg; the buissinesse was how to catch him cunningly, knowing well those people love their beasts. Neverthelesse wee offred guifts, but they would not, which made me stubborne. That dogge was very leane, and as hungry as we weare, but the masters have not suffered so much. I went one night neere that same cottage to doe what discretion permitts me not to speake. Those men weare Nadoneseronons. They weare much respected that nobody durst not offend them, being that we weare uppon their land with their leave. The dogg comes out, not by any smell, but by good like. I take him and bring him a litle way. I stabbed him with my dagger. I brought him to the cottage, where [he] was broyled like a pigge and cutt in pecces, gutts and all, soe every one of the family had his share. The snow where he was killed was not lost; ffor one of our company went and gott it to season the kettles. We began to looke better dayly. We gave the rendezvous to the convenientest place to celebrat that great feast.

The narrative shows that the winter began while Groseilliers and Radisson were guests, as we may say, of the Huron and Menominee Indians, probably at Lac Courte Oreille, near Hayward, Wisconsin. The first snowfall and the ensuing separation of the Indians into parties of two or three for procuring sustenance by hunting, took place, as we must suppose, in the later part of October or early November, 1659. Two months and a half later, that is, at some time shortly after New Year's day of 1660, they came together at a "small lake, the place of rendezvous."

This place was in the country of the Sioux, as Radisson tells us; and apparently from its vicinity, as he also says later, Groseilliers and Radisson went in seven days' travel to visit the prairie Sioux. To meet these conditions, I think that the appointed rendezvous, where severe famine prevailed, was at or not far distant from Knife lake, in Kanabec county, Minnesota, about fifteen miles southeast from Mille Lacs. Knife lake

derived its name, as shown by the late Hon. J. V. Brower (in *Kathio,* 1901, page 43), from the first acquirement of steel knives there by the Isanti or Knife Sioux, probably at this time in their dealings with Groseilliers and Radisson and with the Hurons and Ottawas of their company. It is about ninety miles west of Lac Courte Oreille, and all the intervening country was good hunting ground, probably then, as later, a neutral and usually uninhabited tract, between the Sioux and their eastern neighbors. From Knife lake southwestward to the broad prairie region of the Minnesota river, where the prairie Sioux (the Tintonwans) lived, is only a hundred and twenty-five miles in a straight line, or somewhat farther, about seven days' travel by canoeing, or by a land march late in winter, down the St. Croix or the Rum river to the Mississippi and up the Minnesota river. If, as is here supposed, Knife lake was the rendezvous, it was previously known and had been visited by these Hurons, which they might have done in connection with their journey from Prairie island up the St. Croix to the lakes in northwestern Wisconsin.

After the Indians had gathered at the rendezvous, little game could be captured, the snow being five or six feet deep, for the subsistence of the large company, who numbered probably a thousand or more. During two weeks a most direful famine prevailed, which was made worse by the arrival of about a hundred and fifty Ottawas with their families. Though these Indians brought little or no food, and were themselves starving before their arrival, they received a share of the scanty provisions and game of the Hurons, to whom they bartered the highly valued iron and steel knives and hatchets which they had obtained in trade from the French. With the assemblage thus increased to a total of probably fifteen hundred men, women and children, terrible starvation followed. They were obliged even to make a thin soup from their beaver skins. The "greatest subsistence," however, which was known to these Indians for such times of starvation was a broth or soup made from boiled, smoked, and powdered bark of a "rind tree which grows like ivie about the trees," evidently the climbing bittersweet (Celastrus

scandens, L.). This shrub, climbing around the trunks of trees, is common in woodlands throughout Wisconsin and Minnesota, excepting the extreme northern part of this state, north and northwest of Lake Superior. In these dreadful straits of famine more than five hundred died, as Radisson tells us; and he and his brother-in-law only narrowly escaped from death.

DEALINGS WITH THE SIOUX AND THE CREES.

Continuing his narration, Radisson gives a very interesting account of a visit by eight men of the Sioux, probably of the Isanti tribe living around Mille Lacs, and sixteen women bearing gifts, who came to Groseilliers and himself while they were still living apparently with the Hurons in the vicinity of Knife lake. This very remarkable visit and its ceremonies with gifts, between the Sioux and the French traders, became probably the origin of the names Knife lake and river, and of this Isanti or Knife branch of the great Sioux nation or group of many tribes.

The time of the visit of these twenty-four Sioux is stated to have been "some two moons" after the famine; and again it is said that the grain brought by the visitors would have been welcome a month or two earlier. Accordingly we must consider the date of the visit and eight days of feasting with the Sioux to have been in the first half of March, or about then, ending near the middle of this month, in 1660. So many other proceedings are told, with allowances of time, for the latter part of the cold season, before the ice wholly disappeared from the west end of Lake Superior, that it is necessary to assign as short estimates of time throughout as seen compatible with the successive parts of the narrative. This part runs as follows:

Some 2 moons after there came 8 ambassadors from the nation of Nadoneseronons, that we will call now the Nation of the beefe. Those men each had 2 wives, loadened of Oats, corne [wild rice] that growes in that countrey, of a small quantity of Indian corne, with other grains, & it was a present to us, which we received as a great favour & token of friendshippe; but it had been welcome if they had brought it a month or two before. They made great ceremonys in greasing

our feete and leggs, and we painted them with red. They stript us naked and putt upon us cloath of buffe and of white castors. After this they weeped uppon our heads until we weare wetted by their tears, and made us smoake in their pipes after they kindled them. It was not in common pipes, but in pipes of peace and of the warrs, that they pull out but very seldom, when there is occasion for heaven and earth. This done, they perfumed our cloaths and armour one after another, and to conclude did throw a great quantity of tobbacco into the fire. We told them that they prevented us, for letting us know that all persons of their nation came to visite us, that we might dispose of them.

The next morning they weare called by our Interpretor. We understood not a word of their language, being quit contrary to those that we weare with. They are arrived, they satt downe. We made a place for us more elevated, to be more att our ease & to appeare in more state. We borrowed their Calumet, saying that we are in their countrey, and that it was not lawfull for us to carry anything out of our countrey. That pipe is of a red stone, as bigge as a fist and as long as a hand. The small reede as long as five foot, in breadth, and of the thicknesse of a thumb. There is tyed to it the tayle of an eagle all painted over with severall coulours and open like a fan, or like that which makes a kind of a wheele when he shuts; below the toppe of the steeke is covered with feathers of ducks and other birds that are of a fine collour. We tooke the tayle of the eagle, and instead of it we hung 12 Iron bows in the same manner as the feathers weare, and a blade about it along the staffe, a hattchett planted in the ground, and that calumet over it, and all our armours about it uppon forks. Every one smoaked his pipe of tobacco, nor they never goe without it. During that while there was a great silence. We prepared some powder that was litle wetted, and the good powder was precious to us. Our Interpreter told them in our name, "Brethren, we have accepted of your guifts. Yee are called here to know our will and pleasur that is such: first, we take you for our brethren by taking you into our protection, and for to shew you, we, instead of the eagles' tayle, have putt some of our armours, to the end that no ennemy shall approach it to breake the affinitie that we make now with you." Then we tooke the 12 Iron off the bowes and lift them up, telling them those points shall passe over the whole world to defend and destroy your ennemyes, that are ours. Then we putt the Irons in the same place againe. Then we tooke the sword and bad them have good courage, that by our means they should vanquish their Ennemy. After we tooke the hattchett that was planted in the ground, we tourned round about, telling them that we should kill those that would warre against them, and that we would make forts that they should come with more assurance to the feast of the dead. That done,

we throw powder in the fire, that had more strenght then we thought; it made the brands fly from one side to the other. We intended to make them believe that it was some of our Tobacco, and make them smoake as they made us smoake. But hearing such a noise, and they seeing that fire fled of every side, without any further delay or looke for so much time as looke for the dore of the cottage, one runne one way, another an other way, ffor they never saw a sacrifice of tobacco so violent. They went all away, and we onely stayed in the place. We followed them to reassure them of their faintings. We visited them in their appartments, where they received [us] all trembling for feare, believing realy by that same meanes that we weare the Devils of the earth. There was nothing but feasting for 8 dayes.

Soon after the earliest snowfall in the autumn Groseilliers and Radisson had "sent messengers everywhere" among the Dakota or Siouan tribes, inviting them to meet for a great celebration of a ceremonial feast within five months, that is, at the opening of spring, when the French traders would give "presents of peace and union." At the rendezvous for the midwinter, supposed to be Knife lake, two Sioux had come to Groseilliers, Radisson, and the Hurons, in the temporary encampment, before the end of the time of famine; and to these Sioux envoys they had given "the rendezvous to the convenientest place to celebrate that great feast." The later coming of the eight men and sixteen women of the Sioux was a preliminary of the convention of delegations from all the Sioux tribes, called by Radisson "eighteen several nations," for the feast and parades to which they had been looking forward, with elaborate preparations and training, through all the winter.

The French traders designed, on their part, to make this celebration of feasting and spectacular exhibitions an occasion long to be remembered by all these Indians as the first time when they were witnesses of the superiority of the French, with their firearms, iron kettles, steel hatchets and knives, awls and needles, glass and tin-plated ornaments, etc. It was to be the beginning of a profitable fur trade for themselves, and for their successors during the future years. Prestige for France in her expected sway over these savage tribes was here to be established, somewhat as Jean Nicolet twenty-five years before

had won the admiration, confidence, and commercial allegiance of the Winnebago Indians in eastern Wisconsin.

Some small tract of prairie, or of land cleared for cultivation, in the midst of the generally wooded country surrounding the former rendezvous, which we have identified as near Knife Lake, was chosen by Groseilliers and Radisson, with their two Sioux visitors in January, to be the scene of the grand celebration in the spring. There a large area was paced out and was called a fort, where the tepees of the encamping Sioux could be seen from a long distance as they were approached across a meadow that extended along the course of a brook "more than four leagues."

After a few days of ceremonies, speech-making, feasting, and bestowal of gifts, it was decided to invite also the Crees, of whom a large party were known to be encamped at the distance of two days' journey northward. About fifty of the Indians, and Radisson with them, went therefore to this temporary Cree village, to extend the invitation, and meanwhile many Indians from all over the region flocked to the place of the grand celebration to see "those two redoubted nations" meet for friendly rivalry in feats of strength, agility, and skill, and in dancing and music.

Probably about three weeks were occupied in the various ceremonies and festivities, from the time when the representatives of eighteen tribes of the Sioux first arrived, until the close of the feast, when "every one returns to his country well satisfied." The whole celebration thus extended, we may think, approximately from the middle of March to the first week of April. It was a very great event for the Sioux, who then, in their many tribes and bands, inhabited the greater part of the present state of Minnesota. Its story is appreciatively told by Radisson as follows, continuing directly from our last foregoing quotation:

> The time was now nigh that we must goe to the rendezvous; this was betwixt a small lake and a medow. Being arrived, most of ours [the Hurons] weare allready in their cottages. In 3 dayes' time there arrived eighten severall nations, and came privatly, to have done the sooner. As we became to the number of 500, we held a councell. Then the shouts and cryes and the encouragements weare proclaimed,

that a fort should be builded. They went about the worke and made a large fort. It was about 603 score paces in lenght and 600 in breadth, so that it was a square. There we had a brooke that came from the lake and emptied itselfe in those medows, which had more then foure leagues in lenght. Our fort might be seene afar off, and on that side most delightfull, for the great many stagges that tooke the boldnesse to be carried by quarters where att other times they made good cheare.

In two dayes this was finished. Soon 30 yong men of the nation of the beefe arrived there, having nothing but bows and arrows, with very short garments, to be the nimbler in chasing the stagges. The Iron of their arrows weare made of staggs' pointed horns very neatly. They weare all proper men, and dressed with paint. They weare the discoverers and the foreguard. We kept a round place in the midle of our Cabban and covered it with long poles with skins over them, that we might have a shelter to keepe us from the snow. The cottages weare all in good order; in each 10, twelve companies or families. That company was brought to that place where there was wood layd for the fires. The snow was taken away, and the earth covered with deale tree bows. Severall kettles weare brought there full of meate. They rested and eat above 5 houres without speaking one to another. The considerablest of our companyes went and made speeches to them. After one takes his bow and shoots an arrow, and then cryes aloud, there speaks some few words, saying that they weare to lett them know the Elders of their village weare to come the morrow to renew the friendship and to make it with the ffrench, and that a great many of their yong people came and brought them some part of their wayes to take their advice, ffor they had a minde to goe against the Christinos, who weare ready for them, and they in like manner to save their wives & children. They weare scattered in many Cabbans that night, expecting those that weare to come. To that purpose there was a vast large place prepared some hundred paces from the fort, where everything was ready for the receiving of those persons. They weare to sett their tents, that they bring uppon their backs. The pearches were putt out and planted as we received the news; the snow putt aside, and the boughs of trees covered the ground.

The day following they arrived with an incredible pomp. This made me thinke of the Intrance that the Polanders did in Paris, saving that they had not so many Jewells, but instead of them they had so many feathers. The ffirst weare yong people with their bows and arrows and Buckler on their shoulders, uppon which weare represented all manner of figures, according to their knowledge, as of the sun and moone, of terrestriall beasts, about its feathers very artificialy painted. Most of the men their faces weare all over dabbed with severall collours. Their hair turned up like a Crowne, and weare cutt very

even, but rather so burned, for the fire is their cicers. They leave a tuff of haire upon their Crowne of their heads, tye it, and putt att the end of it some small pearles or some Turkey stones [turquoise], to bind their heads. They have a role commonly made of a snake's skin, where they tye severall bears' paws, or give a forme to some bitts of buffs' horns, and put it about the said role. They grease themselves with very thick grease, & mingle it in reddish earth, which they bourne, as we our breeks. With this stuffe they gett their haire to stand up. They cutt some downe of Swan or other fowle that hath a white feather, and cover with it the crowne of their heads. Their ears are pierced in 5 places; the holes are so bigg that your little finger might pass through. They have yallow waire that they make with copper, made like a starr or a half moone, & there hang it. Many have Turkeys [turquoises]. They are cloathed with Oriniack & staggs' skins, but very light. Every one had the skin of a crow hanging att their girdles. Their stokens all imbrodered with pearles and with their own porke-pick worke. They have very handsome shoose laced very thick all over with a peece sowen att the side of the heele, which was of a haire of Buff, which trailed above halfe a foot upon the earth, or rather on the snow. They had swords and knives of a foot and a halfe long, and hattchetts very ingeniously done, and clubbs of wood made like backswords; some made of a round head that I admired it. When they kille their ennemy they cutt off the tuffe of haire and tye it about their armes. After all, they have a white robe made of Castors' skins painted. Those having passed through the midle of ours, that weare ranged att every side of the way. The Elders came with great gravitie and modestie, covered with buff coats which hung downe to the grounde. Every one had in his hand a pipe of Councell sett with precious jewells. They had a sack on their shoulders, and that that holds it grows in the midle of their stomacks and on their shoulders. In this sacke all the world is inclosed. Their face is not painted, but their heads dressed as the foremost. Then the women laden like unto so many mules, their burdens made a greater shew then they themselves; but I supose the weight was not equipolent to its bignesse. They weare conducted to the appointed place, where the women unfolded their bundles, and flang their skins whereof their tents are made, so that they had howses [in] lesse then half an houre.

After they rested they came to the biggest cabbane constituted for that purpose. There weare fires kindled. Our Captayne made a speech of thanksgiving, which should be long to writ it. We are called to the councell of new come chiefe, where we came in great pompe, as you shall heare. First they come to make a sacrifice to the ffrench, being Gods and masters of all things, as of peace, as warrs; making the knives, the hattchetts, and the kettles rattle, etc. That they came

purposely to putt themselves under their protection. Moreover, that they came to bring them back againe to their countrey, having by their means destroyed their Ennemyes abroad & neere. So said, they present us with guifts of Castors' skins, assuring us that the mountains weare elevated, the valleys risen, the ways very smooth, the bows of trees cutt downe to goe with more ease, and bridges erected over rivers, for not to wett our feete; that the dores of their villages, cottages of their wives and daughters, weare open at any time to receive us, being wee kept them alive by our marchandises. The second guift was, that they would die in their alliance, and that to certifie to all nations by continuing the peace, & weare willing to receive and assist them in their countrey, being well satisfied they weare come to celebrat the feast of the dead. The 3rd guift was for to have one of the doors of the fort opened, if neede required, to receive and keepe them from the Christinos that come to destroy them; being allwayes men, and the heavens made them so, that they weare obliged to goe before to defend their countrey and their wives, which is the dearest thing they had in the world, & in all times they weare esteemed stout & true soldiers, & that yett they would make it appeare by going to meet them; and that they would not degenerat, but shew by their actions that they weare as valiant as their fore ffathers. The 4th guift was presented to us, which was of Buff skins, to desire our assistance ffor being the masters of their lives, and could dispose of them as we would, as well of the peace as of the warrs, and that we might very well see that they did well to goe defend their owne countrey; that the true means to gett the victory was to have a thunder. They meant a gune, calling it miniskoick.

The speech being finished, they intreated us to be att the feast. We goe presently back again to fournish us with woaden bowls. We made foure men to carry our guns afore us, that we charged of powder alone, because of their unskillfulnesse that they might have killed their ffathers. We each of us had a paire of pistoletts and Sword, a dagger. We had a role of porkepick about our heads, which was as a crowne, and two litle boyes that carryed the vessels that we had most need of; this was our dishes and our spoons. They made a place higher & most elevate, knowing our customs, in the midle for us to sitt, where we had the men lay our armes. Presently comes foure elders, with the calumet kindled in their hands. They present the candles to us to smoake, and foure beautifull maids that went before us, carrying bears' skins to putt under us. When we weare together, an old man rises & throws our calumet att our feet, and bids them take the kettles from of the fire, and spoake that he thanked the sun that never was a day to him so happy as when he saw those terrible men whose words makes the earth quacke, and sang a while. Having ended, came and covers us with his vestment, and all naked except his feet

and leggs, he saith, "Yee are masters over us; dead or alive you have the power over us, and may dispose of us as your pleasur." So done, takes the callumet of the feast, and brings it, so a maiden brings us a coale of fire to kindle it. So done, we rose, and one of us begins to sing. We bad the interpreter to tell them we should save & keep their lives, taking them for our brethren, and to testify that we shott of all our artillery, which was of twelve gunns. We draw our swords and long knives to our defence, if need should require, which putt the men in such a terror that they knewed not what was best to run or stay. We throw a handfull of powder in the fire to make a greater noise and smoake.

Our songs being finished, we began our teeth to worke. We had there a kinde of rice, much like oats. It growes in the watter in 3 or 4 foote deepe. There is a God that shews himselfe in every countrey, almighty, full of goodnesse, and the preservation of those poore people who knoweth him not. They have a particular way to gather up that graine. Two takes a boat and two sticks, by which they gett the eare downe and gett the corne out of it. Their boat being full, they bring it to a fitt place to dry it, and that is their food for the most part of the winter, and doe dresse it thus: ffor each man a handfull of that they putt in the pott, that swells so much that it can suffice a man. After the feast was over there comes two maidens bringing wherewithall to smoake, the one the pipes, the other the fire. They offered ffirst to one of the elders, that satt downe by us. When he had smoaked, he bids them give it us. This being done, we went back to our fort as we came.

The day following we made the principall Persons come together to answer to their guifts. Being come with great solemnity, there we made our Interpreter tell them that we weare come from the other side of the great salted lake, not to kill them but to make them live; acknowledging you for our brethren and children, whom we will love henceforth as our owne; then we gave them a kettle. The second guift was to encourage them in all their undertakings, telling them that we liked men that generously defended themselves against all their ennemyes; and as we weare masters of peace and warrs, we are to dispose the affairs that we would see an universall peace all over the earth; and that this time we could not goe and force the nations that weare yett further to condescend & submitt to our will, but that we would see the neighboring countreys in peace and union; that the Christinos weare our brethren, and have frequented them many winters; that we adopted them for our children, and tooke them under our protection; that we should send them ambassadors; that I myself should make them come, and conclude a generall peace; that we weare sure of their obedience to us; that the ffirst that should breake the peace we would be their ennemy, and would reduce them to powder with our heavenly

fire; that we had the word of the Christinos as well as theirs, and our thunders should serve us to make warrs against those that would not submitt to our will and desire, which was to see them good friends, to goe and make warrs against the upper nations, that doth not know us as yett. The guift was of 6 hatchetts. The 3rd was to oblige them to receive our propositions, likewise the Christinos, to lead them to the dance of Union, which was to be celebrated at the death's feast and banquett of kindred. If they would continue the warrs, that was not the meanes to see us againe in their Countrey. The 4th was that we thanked them ffor making us a free passage through their countreys. The guift was of 2 dozen of knives. The last was of smaller trifles.—6 gratters, 2 dozen of awles, 2 dozen of needles, 6 dozens of looking-glasses made of tine, a dozen of litle bells, 6 Ivory combs, with a litle vermillion. But ffor to make a recompence to the good old man that spake so favorably, we gave him a hattchett, and to the Elders each a blade for a sword, and to the 2 maidens that served us 2 necklaces, which putt about their necks, and 2 braceletts for their armes. The last guift was in generall for all the women to love us and give us to eat when we should come to their cottages. The company gave us great Ho! ho! ho! that is, thanks. Our wildmen made others for their interest.

A company of about 50 weare dispatched to warne the Christinos of what we had done. I went myself, where we arrived the 3rd day, early in the morning. I was received with great demonstration of ffriendshippe. All that day we feasted, danced, and sing. I compared that place before to the Buttery of Paris, ffor the great quantity of meat that they use to have there; but now will compare it to that of London. There I received guifts of all sorts of meate, of grease more then 20 men could carry. The custome is not to deface anything that they present. There weare above 600 men in a fort, with a great deale of baggage on their shoulders, and did draw it upon light slids made very neatly. I have not seen them att their entrance, ffor the sun blinded mee. Coming back, we passed a lake hardly frozen, and the sun [shone upon it] for the most part, ffor I looked a while steadfastly on it, so I was troubled for this seaven or eight dayes.

The meane while that we are there, arrived above a thousand that had not ben there but for those two redoubted nations that weare to see them doe what they never before had, a difference which was executed with a great deale of mirth. I ffor feare of being inuied I will obmitt onely that there weare playes, mirths, and batailles for sport, goeing and coming with cryes; each plaid his part. In the publick place the women danced with melody. The yong men that indeavoured to gett a pryse, indeavoured to clime up a great post, very smooth, and greased with oyle of beare and oriniack grease. The stake was att least of 15 foot high. The price was a knife or other thing. We layd

the stake there, but whoso could catch it should have it. The feast was made to eate all up. To honour the feast many men and women did burst. Those of that place coming backe, came in sight of those of the village or fort, made postures in similitud of warrs. This was to discover the ennemy by signs; any that should doe soe we gave orders to take him, or kill him and take his head off. The prisoner to be tyed [and] to fight in retreating. To pull an arrow out of the body; to exercise and strike with a clubbe, a buckler to theire feete, and take it if neede requireth, and defende himselfe, if neede requirs, from the enemy; being in sentery to heark the ennemy that comes neere, and to heare the better lay him downe on the side. These postures are playd while the drums beate. This was a serious thing, without speaking except by nodding or gesture. Their drums weare earthen potts full of watter, covered with staggs-skin. The sticks like hammers for the purpose. The elders have bomkins to the end of their staves full of small stones, which makes a ratle, to which yong men and women goe in a cadance. The elders are about these potts, beating them and singing. The women also by, having a nosegay in their hands, and dance very modestly, not lifting much their feete from the ground, keeping their heads downewards, makeing a sweet harmony. We made guifts for that while 14 days' time. Every one brings the most exquisite things, to shew what his country affoards. The renewing of their alliances, the marriages according to their countrey coustoms, are made; also the visit of the boans of their deceased friends, ffor they keepe them and bestow them uppon one another. We sang in our language as they in theirs, to which they gave greate attention. We gave them severall guifts, and received many. They bestowed upon us above 300 robs of castors, out of which we brought not five to the ffrench, being far in the countrey.

Among all the very interesting records of negotiations and treaties of "peace and union" made with the Indians of the Northwest by forerunners and agents of the French fur trade, none is more picturesque and dramatic than this. In the late autumn or winter of 1634-35, Jean Nicolet, wearing a fantastic silken Chinese vestment, met the Winnebago Indians for a ceremonious conference, in the vague belief that their country might border on the farthest eastern parts of Asia. In 1660, Groseilliers and Radisson, as we have seen, probably within the area of Kanabec county, in the east central part of Minnesota, taught to the Sioux and the Crees, previously hostile to each other, peace and friendship toward the French. In 1679, Du Luth

ceremoniously planted the arms of France in the great village of the Isanti tribe at Mille Lacs, and in other Sioux villages of northeastern Minnesota, none of which, as he says, had been before visited by any Frenchman; and on the 15th of September in that year, at the west end of Lake Superior, he negitiated a great treaty with the assembled tribes of the north, inducing them to make peace with the Sioux, "their common enemy." During the remaining years of the seventeenth century, Perrot, in 1689, at Fort St. Antoine, on the Wisconsin shore of Lake Pepin, and Le Sueur in 1693 at Chequamegon bay, later at his trading post built on Prairie island in 1695 according to the command of the Governor of Canada, and again in the winter of 1700 at his Fort L'Huillier, on the Blue Earth river, were conspicuous by their efforts to maintain peace among the Indian tribes, loyalty to the French, and consequent extension and prosperity of the fur trade.

We may thank Radisson for his particular care to describe the Sioux who attended the great feast. He thus gave the earliest portrayal of the characteristics of that people, the aboriginal owners of the greater part of Minnesota. It is to be regretted, however, that he recorded only a very meager account of the ensuing visit of these French traders with the Sioux of the Buffalo Prairies ("the Nation of the Beef") in their own country.

Groseilliers and Radisson, according to the narration, went, immediately after the feast and probably in the company of the returning Tintonwan Sioux bands, by seven days' travel, to visit them at their homes. Their numerous tribes occupied an extensive prairie region, from eastern Iowa northwesterly through southern Minnesota to lakes Big Stone and Traverse and the broad, very flat, valley plain of the Red river of the North. It seems most probable that the French traders and their Indian escort went by the way of the Rum, Mississippi, and Minnesota rivers, passing the site of Minneapolis. Starting from the vicinity of Knife lake, as we think, very early in April, they spent six weeks in the visit, including in that time, we may suppose, the week of going and two weeks or longer of returning thence

to Lake Superior, so that their arrival at Chequamegon bay was probably within the last week or ten days of May.

Whether they went to the prairie country by canoes or afoot, the route seems to me to have been almost certainly along or near the courses of the Rum river and the Minnesota river. By traveling twenty-five or thirty miles daily, they would come in a week to the neighborhood of Swan lake and the site of New Ulm, in the same country where a hundred and seven years later Captain Jonathan Carver wintered, in 1766-67, with these prairie tribes. But if it be thought that "small journeys" could be no more than fifteen or twenty miles daily, the locality where they came to the camp of the roving and buffalo-hunting Sioux would be perhaps at the Shakopee prairie on the lower part of the Minnesota river, or perhaps even very near to Fort Snelling, or on the site of either of the Twin Cities of St. Paul and Minneapolis.

On the return to Lake Superior, Groseilliers and Radisson accompanied a party of Ojibways who had been trafficking with these Sioux, probably buying furs, under the advice of the French traders, for their trip back to Lower Canada the next summer. The route of the return, doubtless by canoes, was apparently that most used by the Ojibways, passing down the Minnesota and Mississippi rivers, by the sites of Fort Snelling, St. Paul, and Hastings, to the St. Croix, up that river to its headwaters, and thence by many laborious portages, and through small lakes and streams, to Chequamegon bay.

It is my belief that the journey going to the Prairie Sioux was made afoot, and that it reached as far as to the site of Shakopee, with its large prairie; or to Traverse des Sioux, with larger prairies; or, not improbably, to New Ulm, on the broad, far stretching prairies which continue thence uninterrupted for hundreds of miles to the west and south. As Radisson makes no mention of St. Anthony falls, it may be supposed that the Frenchmen and their Indian companions, in passing the area of Minneapolis, took some footpath or trail through the west part of the city area, by lakes Calhoun and Harriet, to save distance in coming to the Minnesota river, so that they would not go within sight of the falls.

The return, with the Ojibway traders, was very surely by canoes. It is therefore quite within the limits of probability to picture in our minds these daring travelers and their Ojibway comrades encamping for a night among the willows of the Mississippi river bank where the union passenger station of the railways centering in St. Paul now stands, or else at the foot of Dayton's bluff, in the east edge of this city, where more than a century later Carver encamped with the Sioux from the Minnesota river.

A different route of the visit to the Sioux on their prairies was suggested by Hon. J. V. Brower, with whom Mr. Alfred J. Hill was associated in the study of the early French explorations, indicating that the Mississippi was crossed by Groseilliers and Radisson "some thirty or forty miles above the present site of St. Paul," that is, near the mouth of the Rum river or of the Crow river, passing thence up the Crow river to its sources and onward west to a large village of these Sioux near Big Stone and Traverse lakes. The distance to be thus traveled, if the Frenchmen went to those lakes, was greater than by the Minnesota river to New Ulm; but they may not have gone that entire distance, as a large encampment of the Prairie Sioux for winter hunting and trapping may have been found in the partly prairie but mostly forest country of the Crow river. It seems to me very much more probable, however, that the route was southward, instead of westward, from the mouth of Rum river. The reasons for this opinion are, first, that the Minnesota river afforded the most convenient navigable communication with the great prairie region; and, second, that the Ojibways could come there for traffic, as noted by Radisson, without going so far from their own territory. Thirty-five years later, when Le Sueur built his trading post on Prairie island, it was on the neutral ground between the Sioux and Ojibways, being therefore chosen as a favorable place for promoting peace between these tribes.

In the Tintonwan camp of great tepees, covered with skins of buffalos, the Frenchmen were told that these Prairie Sioux could muster 7,000 warriors, which, from what they saw, seemed credible. They were shown, probably, masses of native copper

from the glacial drift, such as are occasionally found in eastern and southern Minnesota and far southward in Iowa; also masses of galena, brought by these nomadic people from the lead region of eastern Iowa and northwestern Illinois; and selenite crystals, "transparent and tender," from the Cretaceous shales, and from drift of Cretaceous derivation, on the high Coteau des Prairies southwest of the Minnesota valley.

The too concise description of the visit to the Prairie or Buffalo Sioux is as follows:

This feast ended, every one retourns to his own countrey well satisfied. To be as good as our words, we came to the nation of the beefe, which was seaven small journeys from that place. We promised in like manner to the Christinos the next spring we should come to their side of the upper lake, and there they should meete us, to come into their countrey. We being arrived among that nation of the beefe, we wondred to finde ourselves in a towne where weare grat cabbans most covered with skins and other close matts. They tould us that there weare 7,000 men. This we believed. Those have as many wives as they can keepe. If any one did trespasse upon the other, his nose was cutt off, and often the crowne of his head. The maidens have all maner of freedome, but are forced to mary when they come to the age. The more they bear children the more they are respected. I have seene a man having 14 wives. There they have no wood, and make provision of mosse for their firing. This their place is environed with pearches which are a good distance one from an other, that they gett in the valleys where the Buffe use to repaire, uppon which they do live. They sow corne, but their harvest is small. The soyle is good, but the cold hinders it, and the graine very small. In their countrey are mines of copper, of pewter, and of ledd. There are mountains covered with a kind of Stone that is transparent and tender, and like to that of Venice. The people stay not there all the yeare; they retire in winter towards the woods of the North, where they kill a quantity of Castors, and I say that there are not so good in the whole world, but not in such a store as the Christinos, but far better.

Wee stayed there 6 weeks, and came back with a company of people of the nation of the Sault, that came along with us loaden with booty. We weare 12 dayes before we could overtake our company that went to the lake. The spring approaches, which [is] the fitest time to kill the Oriniack. A wildman and I with my brother killed that time above 600, besides other beasts. We came to the lake side with much paines, ffor we sent our wildmen before, and we two weare forced to make cariages 5 dayes through the woods. After we mett with a com-

pany that did us a great deale of service, ffor they carryed what we had, and arrived att the appointed place before 3 dayes ended. Here we made a fort. Att our arrivall we found att least 20 cottages full.

The French brothers-in-law have returned to Lake Superior, approaching it probably by nearly the same route as they traversed from it, and thus coming to the head of Chequamegon bay, where they had landed from their canoes the preceding autumn. Their first care was to get the merchandise that they had hidden in the ground on the other side of a stream near their little stockade fort. Next they plan for the promised visit to the Crees, in their country on the north shore of the lake. But in drawing their sleds, heavily loaded with merchandise and furs, on the nearly dissolved ice of the bay, Radisson was chilled and wholly disabled by sinking more than knee-deep in the cold water, which caused him a dangerous illness for eight days.

As soon as he had somewhat recovered, he was induced to set out on a journey through the forest with Groseilliers and a large party of "new wildmen." They appear to have traveled northwestward across the Bayfield peninsula, to the lakeshore some twenty-five or thirty miles west of Ashland and the head of Chequamegon bay. But on the third day, Radisson's lameness compelled him to lag behind the company, and for the next three (or five) days he wandered on alone, until he was found by one of the Indians who was searching for him. Soon afterward he came to an Indian camp on the lakeshore, where he found Groseilliers and a company of Crees. The lake ice had mostly melted, but many drifting masses remained, which endangered the canoe passage made at night across this narrow western end of the lake by Groseilliers and Radisson, following the Crees who crossed the day before. Apparently the passage was chosen to be at night in order to leave the Hurons and other Indians of their company unawares. We may be quite sure that it was explainable in some way for the interest of the traders in buying furs. Radisson asserts that the distance "thwarted" across the lake was fifteen leagues, or about forty miles, the French league being 2.76 English miles; but it really was only half so far, if my idea of the place of crossing is correct, as about midway between Ashland and the cities of Superior and Duluth.

The date of this crossing, when the ice had melted, excepting broken and drifting ice fragments, may have been as late as a week or ten days after the beginning of June, which accords well with our foregoing computations of the dates of events recorded during the entire winter and spring. The late Hon. John R. Carey, in his paper on the history of Duluth, written in 1898 and published in Volume IX of the Minnesota Historical Society Collections, stated that he "knew of two men getting off a steamboat that had been stuck in the ice for several days, on the 9th of June, almost forty years ago, and walking to shore on the broken ice a distance of six or eight miles." So late continuance of the ice in the lake adjacent to Duluth is infrequent; but it may perhaps have remained even later in the year 1660, when Groseilliers and Radisson were there. The crossing apparently was not earlier than the first of June, nor later than June 15th.

The narration, resumed from the preceding quotation, runs thus:

One very faire evening we went to finde what we hide before, which we finde in a good condition. We went about to execut our resolution, fforseeing that we must stay that year there, ffor which wee weare not very sorry, being resolved to know what we heard before. We waited untill the Ice should vanish, but received [news] that the Octanaks built a fort on the point that formes that Bay, which resembles a small lake. We went towards it with all speede. We had a great store of booty which we would not trust to the wildmen, ffor the occasion makes the thiefe. We overloaded our slide on that rotten Ice, and the further we went the Sun was stronger, which made our Trainage have more difficultie. I seeing my brother so strained, I tooke the slide, which was heavier then mine, and he mine. Being in that extent above foure leagues from the ground, we sunke downe above the one halfe of the legge in the Ice, and must advance in spight of our teeth. To leave our booty was to undoe us. We strived so that I hurted myselfe in so much that I could not stand up right, nor any further. This putt us in great trouble. Uppon this I advised my brother to leave me with his slide. We putt the two sleds one by another. I tooke some cloathes to cover me. After I stripped myselfe from my wett cloathes, I layed myselfe downe on the slide; my brother leaves me to the keeping of that good God. We had not above two leagues more to goe. He makes hast and came there in time and sends wildmen for me and the slids. Here we found the perfidiousnesse of the Octanaks. Seeing us in Extremitie, would prescribe us laws. We promised them whatever they asked. They came to fetch me.

For eight days I was so tormented I thought never to recover. I rested neither day nor night; at last by means that God and my brother did use, which was by rubbing my leggs with hott oyle of bears and keeping my thigh and leggs well tyed, it came to its former strenght. After a while I came to me selfe. There comes a great company of new wildmen to seeke a nation in that land for a weighty buissinesse. They desired me to goe a long, so I prepare myselfe to goe with them. I marched well 2 days; the 3rd day the sore begins to breake out againe, in so much that I could goe no further. Those left me, albeit I came for their sake. You will see the cruelties of those beasts, and I may think that those that liveth on fish uses more inhumanities then those that feed upon flesh; neverthelesse I proceeded forwards the best I could, but knewed [not] where for the most part, the sun being my onely guide.

There was some snow as yett on the ground, which was so hard in the mornings that I could not percave any tracks. The worst was that I had not a hattchett nor other arme, and not above the weight of ten pounds of victualls, without any drink. I was obliged to proceed five dayes for my good fortune. I indured much in the morning, but a litle warmed, I went with more ease. I looked betimes for som old cabbans where I found wood to make fire wherwith. I melted the snow in my cappe that was so greasy. One night I finding a cottage covered it with boughs of trees that I found ready cutt. The fire came to it as I began to slumber, which soone awaked me in hast, lame as I was, to save meselfe from the fire. My racketts, shoos, and s'okens kept me my life; I must needs save them. I tooke them and flung them as farr as I could in the snow. The fire being out, I was forced to looke for them, as dark as it was, in the said snow, all naked and very lame, and almost starved both for hunger and cold. But what is it that a man cannot doe when he seeth that it concerns his life, that one day he must loose? Yett we are to prolong it as much as we cane, & the very feare maketh us to invent new wayes.

The fifth day I heard a noyse and thought it of a wolfe. I stood still, and soone perceived that it was of a man. Many wild men weare up and downe looking for me, fearing least the Bears should have devoured me. That man came neere and saluts me, and demands whether it was I. We both satt downe; he looks in my sacke to see if I had victualls, where he finds a peece as bigg as my fist. He eats this without participation, being their usuall way. He inquireth if I was a hungary. I tould him no, to shew meself stout and resolute. He takes a pipe of tobacco, and then above 20 pounds of victualls he takes out of his sack, and greased, and gives it me to eate. I eat what I could, and gave him the rest. He bids me have courage, that the village was not far off. He demands if I knewed the way, but I was not such as should say no. The village was att hand. The other wild-

men arrived but the day before, and after a while came by boats to the lake. The boats weare made of Oriniacks' skins. I find my brother with a company of Christinos that weare arrived in my absence. We resolved to cover our buissinesse better, and close our designe as if we weare going a hunting, and send them before; that we would follow them the next night, which we did, & succeeded, but not without much labor and danger; for not knowing the right way to thwart the other side of the lake, we weare in danger to perish a thousand times because of the crums of Ice. We thwarted a place of 15 leagues. We arrived on the other side att night. When we came there, we knewed not where to goe, on the right or left hand, ffor we saw no body. Att last, as we with full sayle came from a deepe Bay, we perceived smoake and tents. Then many boats from thence came to meete us. We are received with much joy by those poore Christinos. They suffered not that we trod on ground; they leade us into the midle of their cottages in our own boats, like a couple of cocks in a Basquett. There weare some wildmen that followed us but late. * * *

FICTITIOUS JOURNEY TO HUDSON BAY.

Without beginning a new paragraph, Radisson turns abruptly away from the Cree encampment on the north shore of Lake Superior, doubtless somewhere between fifteen and fifty miles northeast of Duluth, and quite probably very near the site of the present town of Two Harbors (but possibly farther west, close to the mouth of Knife river, or farther east, at Beaver bay), where the Crees had so heartily welcomed these traders. In two short sentences he reaches Hudson bay, and before the end of the paragraph he supplies confirmations of this statement by saying that they found a ruined house bearing bullet marks, and that the Indians there told of European visitors, meaning evidently that sailing vessels had come to that southern part of the bay. This section of the narrative, including indeed a whole year, from the arrival at the Cree camp northwest of Lake Superior to the time of preparations for the return to Lower Canada, seems to me to have been fictitiously inserted by Radisson, nearly as he added a fictitious year, according to my conclusions before noted, in the account of his previous far western expedition.

At the end of his narration of that expedition, Radisson wrote: "My brother and I considered whether we should dis-

cover what we have seene or no; and because we had not a full and whole discovery, which was that we have not been in the bay of the north, not knowing anything but by report of the wild Christinos, we would make no mention of it for feare that those wildmen should tell us a fibbe. We would have made a discovery of it ourselves and have an assurance, before we should discover anything of it." After reading these words, I have been very unwilling to disbelieve our author concerning the journey from Lake Superior to Hudson bay, which was the chief object of ambition to both these explorers; but full consideration appears to me to show that Radisson here told to his English patrons, on a large scale and deliberately, for his personal advancement, what he feared that the wild Crees might have told to him, a fiction.

It will be preferable to give the continuation of Radisson's narrative, as follows, before stating in detail my numerous reasons for thus regarding it as false.

* * * We went away with all hast possible to arrive the sooner att the great river. We came to the seaside, where we finde an old howse all demollished and battered with boulletts. We weare tould that those that came there weare of two nations, one of the wolf, the other of the long-horned beast. All those nations are distinguished by the representation of the beasts or animals. They tell us particularities of the Europians. We know ourselves, and what Europ is, therefore in vaine they tell us as for that.

We went from Isle to Isle all that summer. We pluckt abundance of ducks, as of all other sort of fowles; we wanted nor fish nor fresh meate. We weare well beloved, and weare overjoyed that we promised them to come with such shipps as we invented. This place hath a great store of cows. The wildmen kill them not except for necessary use. We went further in the bay to see the place that they weare to passe that summer. That river comes from the lake and empties itselfe in the river of Sagnes, called Tadousack, which is a hundred leagues in the great river of Canada, as where we weare in the Bay of the north. We left in this place our marks and rendezvous. The wildmen that brought us defended us above all things, if we would come directly to them, that we should by no means land, and so goe to the river to the other sid, that is, to the north, towards the sea, telling us that those people weare very treacherous. Now, whether they tould us this out of pollicy, least we should not come to them ffirst, & so be deprived of what they thought to gett from us [I know not]. In

that you may see that the envy and envy raigns every where amongst poor barbarous wild people as att Courts. They made us a mapp of what we could not see, because the time was nigh to reape among the bustards and Ducks. As we came to the place where these oats growes (they grow in many places), you would think it strang to see the great number of ffowles, that are so fatt by eating of this graine that heardly they will move from it. I have seene a wildman killing 3 ducks at once with one arrow. It is an ordinary thing to see five [or] six hundred swans together. I must professe I wondered that the winter there was so cold, when the sand boyles att the watter side for extreame heate of the sun. I putt some eggs in that sand, and leave them halfe an houre; the eggs weare as hard as stones. We passed that summer quietly, coasting the seaside, and as the cold began, we prevented the Ice. We have the commoditie of the river to carry our things in our boats to the best place, where weare most bests.

This is a wandring nation, and containeth a vaste countrey. In winter they live in the land for the hunting sake, and in summer by the watter for fishing. They never are many together, ffor feare of wronging one another. They are of a good nature, * * * having but one wife, and are [more] satisfied then any others that I knewed. They cloath themselves all over with castors' skins in winter, in summer of staggs' skins. They are the best huntsmen of all America, and scorns to catch a castor in a trappe. The circumjacent nations goe all naked when the season permitts it. But this have more modestie, ffor they putt a piece of copper made like a finger of a glove, which they use before their nature. They have the same tenets as the nation of the beefe, and their apparell from topp to toe. The women are tender and delicat, and takes as much paines as slaves. They are of more acute wits then the men, ffor the men are fools, but diligent about their worke. They kill not the yong castors, but leave them in the watter, being that they are sure that they will take him againe, which no other nation doth. They burne not their prisoners, but knock them in the head, or slain them with arrows, saying it's not decent for men to be so cruell. They have a stone of Turquois from the nation of the buff and beefe, with whome they had warrs. They pollish them, and give them the forme of pearle, long, flatt, round and [hang] them att their nose. They [find] greene stones, very fine, att the side of the same bay of the sea to the norwest. There is a nation called among themselves neuter. They speake the beefe and Christinos' speech, being friends to both. Those poore people could not tell us what to give us. They weare overjoyed when we sayd we should bring them commodities. We went up on another river, to the upper lake. The nation of the beefe sent us guifts, and we to them, by [the] ambassadors. In the midle of winter we joyned with a Company of the fort, who gladly received us. They weare resolved to goe to the ffrench the next

spring, because they weare quite out of stocke. The feast of the dead consumed a great deale of it. * * *

By our ambassadors I came to know an other Lake which is northerly of their countrey. They say that it's bigger then all the rest. The upper end is allways frozen. Their ffish comes from those parts. There are people that lives there and dare not trade in it towards the south. There is a river so deepe and blacke that there is no bottome. They say that fish goes neither out nor in to that river. It is very warme, and if they durst navigate in it, they should not come to the end in 40 dayes. That river comes from the lake, and the inhabitants makes warrs against the birds, that defends and offends with theire bills that are as sharpe as sword. This I cannot tell for truth, but told me. * * *

If Radisson had made the long journey with canoes from Lake Superior to Hudson bay, by any one of several possible routes, it seems very certain that he would have given some account of the route, more than to indicate vaguely that it was by "the great river." The only route that would suggest such description is the entirely improbable one by way of Lake Winnipeg and the Nelson river. His claim to have reached Hudson bay is thus shown to be a fiction, because he would come to it by rivers of no great size. The error, curiously, is opposite to that which discredits his assertion in the former western expedition, that they came to the coast of the Gulf of Mexico, where he failed to describe the necessary route thither by the greatest river of our continent.

Describing the fauna of the Hudson bay region, Radisson says that it "had a great store of cows," that is, buffaloes. This statement, as Dr. George Bryce remarks, is inapplicable to Hudson bay, which lies far northeast of the former range of the buffalo, its limits being in the vicinity of the Lake of the Woods and Lake Winnipeg, near the northeastern borders of the vast prairie area.

The most absurd error of our narrator is his assertion concerning the remarkable heat of summer days in that northern country, of which he had perhaps received exaggerated ideas from the descriptions given by the Crees. It brands the whole story of the travel to Hudson bay as false when we are told that eggs can be cooked there by the heat of the beach sand, and that

Radisson, in trying the experiment, left the eggs too long, so that they were boiled "as hard as stones."

The Jesuit Relations and Journal indicate only one year as the duration of this expedition, which would suffice for all the narration of Radisson excepting the year that he gives to his vague and erroneous description of travel to Hudson bay and spending the summer there. He says that they returned to Lake Superior by another river, a different canoe route; but he makes no mention of seeing the Lake of the Woods or Lake Winnipeg either in going or returning. In view of all these considerations, we must reject the statements of the French authors, Potherie and Jeremie, who say that Groseilliers and Radisson visited Hudson bay overland from Lake Superior; and also that of the English historian, Oldmixon, who wrote that these two French explorers, coming to the lake of the Assiniboines (Lake Manitoba or Lake Winnipeg), were thence conducted by the savages to Hudson bay. Such claims were doubtless made by Groseilliers and Radisson, both in England and France, during the next twenty-five years, for the prestige to be thus obtained in proffering their services for sea expeditions and commerce in the Hudson bay region; but no credence should be given to this part of Radisson's narration.

Professor Bryce well says: "Closely interpreted, it is plain that Radisson had not only not visited Hudson or James bay, but that he had a wrong conception of it altogether. He is simply giving a vague story of the Christinos."

Oldmixon's statement that these French adventurers traveled first to the Assiniboine country and Lake Winnipeg is disproved by Radisson's description of that lake, based on his hearsay from the Indians. As we should expect, gross mistakes are admitted, as the estimate that it is larger than any of the lakes tributary to the St. Lawrence, and that its northern part is "always frozen." It is also noteworthy that Radisson makes no mention of the Assiniboines in connection with these expeditions, excepting that, at the end of his narration, their old name, Asinipour, is included in his list of "the Nations that live in the North." If he had traveled to the area of Manitoba, he could

not have failed to become acquainted with the Assiniboines and to give some account of them.

Besides the evidence contained in the Jesuit writings of 1659-60, implying that these Frenchmen spent only one year in this second western expedition, and making no mention of their going to Hudson bay (for which indeed they could not have had sufficient time in an absence of only a year from Lower Canada), the Relation for that year otherwise adds to our distrust of the Hudson bay statement of Radisson. During the summer of 1659, when, if this narration be accepted, he and Groseilliers were going "from isle to isle" in James and Hudson bays, the Jesuit Relation informs us that a journey about Hudson bay was made by an Algonquian chief or captain, named Awatanik, who had been baptized ten years before in the country of Lake Nipissing. This Indian, according to the Relation, went across from Lake Superior and coasted "along the entire Bay," finding abundance of game, and conversing much with the Indian tribes there. Returning to the St. Lawrence region by a southeastern route, he was interviewed July 30th, 1660, on the Saguenay river by the Jesuit reporter for the Relation of 1659-60. With such definite and full intelligence from the region of Hudson bay for the very year when Radisson claims to have been there, the Relation yet has no word of confirmation of his assertions, which, bearing many inherent marks of falsehood, seem from every point of view unworthy of our acceptance.

How far northward these traders advanced, we cannot determine; but to the present writer it appears quite unlikely that they went so far as to the northern boundary of Minnesota. Some writers have supposed that the "R. des Grosillers" of Franquelin's map in 1688 was named for Groseilliers, marking his route of departure from Lake Superior to go to Hudson bay; but it seems better to consider this the Gooseberry river of the present map, translated from its Indian and French names, so designated for its abundance of wild gooseberries. From the same berries Chouart adopted this title, probably likewise given to a land estate owned by him at Three Rivers. The map of Franquelin was apparently drafted for this part mainly ac-

cording to information from Du Luth, who had recently traveled much west and north of Lake Superior.

THE RETURN TO MONTREAL AND THREE RIVERS.

Continuing from the last quotation of Radisson's narrative, it gives in the same paragraph the circumstances of the departure to return to Lower Canada, apparently starting from Chequamegon bay, with a great company of Indians and very valuable furs, as follows:

* * * All the circumjacent neighbours do incourage us, saying that they would venter their lives with us, for which we weare much overjoyed to see them so freely disposed to go along with us. Here nothing but courage. "Brother, doe not lye, ffor the ffrench will not believe thee." All men of courage and vallour, lett them fetch commodities, and not stand lazing and be a beggar in the cabbane. It is the way to be beloved of women, to goe and bring them wherewithall to be joyfull. We present guifts to one and to another for to warne them to that end that we should make the earth quake, and give terror to the Iroquoits if they weare so bold as to shew themselves. The Christinos made guifts that they might come with us. This was graunted unto them, to send 2 boats, to testifie that they weare retained slaves among the other nations, although they furnish them with castors. The boats ready, we embarque ourselves. We weare 700. There was not seene such a company to goe downe to the ffrench. There weare above 400 Christinos' boats that brought us their castors, in hopes that the people would give some marchandises for them. Att their retourne the biggest boats could carry onely the man and his wife, and could scarce carry with them 3 castors, so little weare their boats. In summer time I have seene 300 men goe to warrs, and each man his boat, ffor they are that makes the least boats. The company that we had filled above 360 boats. There weare boats that caryed seaven men, and the least two. * * *

Radisson says that in two days they arrived at "the River of the sturgeon, so called because of the great quantity of sturgeons that we tooke there," enough of these fish being dried to serve as provision for this large company during the next two weeks of canoeing along the lakeshore. It was doubtless the Ontonagon river, of which Dablon wrote, in the Jesuit Relation of 1669-70, as follows: "In the River named Nantounagan,

which is toward the South, very extensive fishing for Sturgeon is carried on, day and night, from Spring until Autumn; and it is there that the Savages go to lay in their provision."

Before they came to the Keweenaw peninsula, they surprised a small camp of seven Iroquois, "who doubtlesse stayed that winter in the lake of the hurrons, and came there to discover somewhat." The Iroquois abandoned their boat and the camp equipage, as a kettle, gun, hatchet, etc., and fled into the woods. The Indians accompanying Groseilliers and Radisson were greatly alarmed, lest they should meet many Iroquois, and resolved therefore to turn back and wait another year. With all the persuasion of the two Frenchmen, about a fortnight was lost in mustering courage again to advance. Radisson says:

* * * Twelve dayes are passed, in which time we gained some hopes of faire words. We called a councell before the company was disbanded, where we represented, if they weare discouvers, they had not vallued the losse of their kettle, knowing well they weare to gett another where their army layed, and if there should be an army it should appeare and we in such an number, they could be well afraid and turne backe. Our reasons weare hard and put in execution. The next day we embarqued, saving the Christinos, that weare afraid of a sight of a boat made of another stuff then theirs, that they went back as we came where the Iroquoits' boat was. Our words proved true and so proceeded in our way.

Being come nigh the Sault, we found a place where 2 of these men sweated, & for want of covers buried themselves in the sand by the watterside to keepe their bodyes from the flyes called maringoines, which otherwise had killed them with their stings. We thwarted those 2 great lakes with great pleasur, having the wind faire with us. It was a great satisfaction to see so many boats, and so many that never had before commerce with the ffrench. So my brother and I thought wee should be wellcomed. But, O covetousnesse, thou art the cause of many evils! We made a small sayle to every boate; every one strived to be not the last. The wind was double wayes favourable to us. The one gave us rest, the other advanced us very much, which wee wanted much because of the above said delay. We now are comed to the cariages and swift streames to gett the lake of the Castors. We made them with a courage, promptitude, and hungar which made goe with hast as well as the wind. We goe downe all the great river without any encounter, till we came to the long Sault, where my brother some years before made a shipwrake. * * *

Near the foot of the Long Sault, Adam Daulac or Dollard, and his handful of brave associates, late in May of this year, 1660, had resisted 500 to 800 Iroquois, saving Montreal from attack and probable destruction by the sacrifice of their own lives. The scene of their heroic battle and death was examined by Radisson and his companions with amazement at the evidences of their valor, and with anxiety for the safety of Montreal, where they arrived the next morning. As at Quebec on their return from the previous expedition, the garrison greeted them by the firing of cannon, "with a great deal of Joy to see so great a number of boats that did almost cover the whole River."

Groseilliers and Radisson were less cordially welcomed at Quebec by the governor, Argenson, as appears in the continuation of the narrative.

Wee stayd 3 dayes at mont-Royall, and then wee went down to the three Rivers. The wildmen did aske our advice whether it was best for them to goe down further. We told them no, because of the dangers that they may meet with at their returne, for the Irokoits could have notice of their comeing down, and so come and lay in ambush for them, and it was in the latter season, being about the end of August. Well, as soon as their businesse was done, they went back again very well satisfied and wee very ill satisfied for our reception, which was very bad considering the service wee had done to the countrey, which will at another time discourage those that by our example would be willing to venture their lives for the benefit of the countrey, seeing a Governor that would grow rich by the labours and hazards of others. * * *

The Governor, seeing us come back with a considerable summe for our own particular, and seeing that his time was expired and that he was to goe away, made use of that excuse to doe us wrong & to enrich himselfe with the goods that wee had so dearly bought, and by our meanes wee made the country to subsist, that without us had beene, I believe, oftentimes quite undone and ruined, and the better to say at his last beeding, no castors, no ship, & what to doe without necessary commodities. He made also my brother prisoner for not having observed his orders, and to be gone without his leave, although one of his letters made him blush for shame, not knowing what to say, but that he would have some of them at what price soever, that he might the better maintain his coach & horses at Paris. He fines us four thousand pounds to make a Fort at the three Rivers, telling us for all manner of satisfaction that he would give us leave to put our

coat of armes upon it, and moreover 6,000 pounds for the country, saying that wee should not take it so strangely and so bad, being wee were inhabitants and did intend to finish our days in the same country with our Relations and Friends. But the Bougre did grease his chopps with it, and more, made us pay a custome which was the 4th part, which came to 14,000 pounds, so that wee had left but 46,000 pounds, and took away 24,000 pounds. Was not he a Tyrant to deal so with us, after wee had so hazarded our lives, & having brought in lesse then 2 years by that voyage, as the Factors of the said country said, between 40 and 50,000 pistolls? For they spoke to me in this manner: "In which country have you been? From whence doe you come? For wee never saw the like. From whence did come such excellent castors? Since your arrivall is come into our magazin very near 600,000 pounds Tournois of that filthy merchandise, which will be prized like gold in France." And them were the very words that they said to me.

Seeing ourselves so wronged, my brother did resolve to goe and demand Justice in France. It had been better for him to have been contented with his losses without going and spend the rest in halfe a year's time in France, having 10,000 pounds that he left with his wife, that was as good a Houswife as he. There he is in France; he is paid with fair words and with promise to make him goe back from whence he came. * * *

Radisson probably means so many livres Tournois or livres of Tours, nearly of the value of a modern franc, or about 19 or 20 cents. His imperfect knowledge of the English money and language misled him to write, throughout these paragraphs, of English pounds, where it would even have included some exaggeration if he had written of so many shillings, instead of pounds.

ACCOUNTS IN THE JESUIT RELATION AND JOURNAL.

The third chapter of the Relation of 1659-60, entitled "Of the Condition of the Algonquin Country, and of Some New Discoveries," gives first a long account of the travels and observations of Awatanik before mentioned, who spent the summer of 1659 in examining the Hudson Bay country, with much information derived from the Indians there and communicated by Awatanik to Father Jerome Lalemant, the writer of this part of the Relation. The remainder of the chapter tells what Lalemant learned, soon after his return from the Saguenay to Quebec,

concerning discoveries by Groseilliers and Radisson, then arriving from their Lake Superior expedition. Their names are not stated, but the details of their journeying and of their visits with the Hurons and Sioux leave no doubt of their identity. In the Journal of the Jesuits, likewise written contemporaneously, Groseilliers is named as one of these two French pioneers of the fur trade. The Relation is as follows:

* * * Scarcely had I returned to Quebec when I found two Frenchmen there who had but just arrived from those upper countries, with three hundred Algonkins, in sixty canoes loaded with furs. Following is an account of what they saw with their own eyes; it will give us a view of the condition of the Algonkins of the West, as we have until now mentioned those of the North.

They passed the winter on the shores of lake Superior, and were fortunate enough to baptize there two hundred little children of the Algonkin Nation with whom they first made their abode. These children were the victims of disease and famine; and forty went straight to Heaven, dying soon after Baptism.

During their winter season, our two Frenchmen made divers excursions to the surrounding tribes. Among other things, they saw, six days' journey beyond the lake toward the Southwest, a tribe composed of the remnants of the Hurons of the Tobacco Nation, who have been compelled by the Iroquois to forsake their native land, and bury themselves so deep in the forests that they cannot be found by their enemies. These poor people—fleeing and pushing their way over mountains and rocks, through these vast unknown forests—fortunately encountered a beautiful River, large, wide, deep and worthy of comparison, they say, with our great river St. Lawrence. On its banks they found the great Nation of the Alimiwec [Illinois], which gave them a very kind reception. This Nation comprises sixty Villages—which confirms us in the knowledge that we already possessed, concerning many thousands of people who fill all those Western regions.

Let us return to our two Frenchmen. Continuing their circuit, they were much surprised on visiting the Nadwechiwec [Sioux], to see women disfigured by having the ends of their noses cut off down to the cartilage; in that part of the face, then, they resemble death's heads. Moreover, they have a round portion of the skin on the top of their heads torn away. Making inquiry as to the cause of this ill treatment, they learned, to their admiration, that it is the law of the country which condemns to this punishment all women guilty of adultery, in order that they may bear, graven on their faces, the penalty and shame of their sin. * * * Our Frenchmen visited the forty Villages of which this Nation is composed, in five of which there are

reckoned as many as five thousand men. But we must take leave of these people,—without much ceremony, however,—and enter the territories of another Nation, which is warlike and which with its bows and arrows has rendered itself as redoubtable among the upper Algonkins as the Iroquois among the lower; and so it bears the name of Poualak, which means "Warriors."

As wood is scanty in supply and small in size in their country, nature has taught them to make fire with coal from the earth and to cover their cabins with skins. Some of the more ingenious make themselves buildings of loam, very nearly as the swallows build their nests; and they would sleep not less comfortably under these skins and this mud than do the great ones of the earth under their golden canopies, if they did not fear the Iroquois, who come in search of them from a distance of five and six hundred leagues.

But if the Iroquois goes thither, why should not we also? If there are conquests to make, why shall not the faith make them, since it makes them in all parts of the world? Behold countless peoples, but the way to them is closed; therefore we must break down all obstacles, and, passing through a thousand deaths, leap into the midst of the flames, to deliver therefrom so many poor Nations. * * *

Exact dates of the departure of Groseilliers and Radisson from Lake Superior, with their Indian company, and of their arrival at Montreal and Three Rivers, are supplied by the Journal of the Jesuit Fathers, which for August, 1660, has this entry:

On the 17th, monseigneur of petraea [Laval, titular Bishop of Arabia Petraea, and vicar apostolic for New France] set out for his Visitation to 3 rivers and Montreal with Monsieur de Charny and others, and with the 4 oiochronons [Iroquois of the Cayuga tribe]. He arrived at Montreal on the 21st, at about 5 o'clock in the evening. The Outawats had arrived there on the 19th, and left on the following day, the 22nd, reaching 3 rivers on the 24th, whence they started on the 27th. They were 300 in number. Des grosilleres was in their Company; he had gone to their country the previous year. They had started from Lake Superior in 100 canoes; 40 turned back and 60 reached here, loaded with furs to the value of 200,000 livres. They left some to the value of 50,000 livres at Montreal, and took the remainder to 3 rivers. They came down in 26 Days, and took two months to return. Des grosillers wintered with the nation of the ox, which he says consists of 4 thousand men; they are sedentary Nadwesseronons. Father Menar, father Albanel, Jean Guerin, and 6 other frenchmen went with them.

The last sentence here quoted has led several writers to infer that Groseilliers and Radisson returned again to the west

in 1660, according to the assertion that Fathers Menard and Albanel "went with them." This expression, however, clearly refers to the large company of the returning Indians. We have no information of any later expedition by Groseilliers and his brother-in-law to the far west. Instead, as we have seen, on account of the exactions of the governor, Groseilliers went to France for redress; and the next expeditions which they took were sea voyages, putting forth their utmost efforts to aid the English in supplanting the French for the Hudson Bay fur trade.

Some writers also have thought one or both of these explorers to be Huguenots, or at least to have forsaken the Roman Catholic church when they entered the service of the English. On the contrary, their baptism of Indian children, probably by Groseilliers, is mentioned approvingly in the Jesuit accounts of both their far western expeditions; and I have found no indication that either of them changed afterward to Protestantism.

SERVICES OF GROSEILLIERS AND RADISSON FOR THE HUDSON BAY COMPANY.

In the short biographic sketches of these brothers-in-law, given at the beginning of this long chapter, their services for England, again for France, and later in a second desertion from their own country to England, were noticed, all belonging to the period after their western expeditions to Minnesota. Not comprehending their discovery of the Mississippi river, and esteeming the peltries of the north to be far more promising for acquisition of wealth than any traffic, colonization, and development of the fertile western and southern country beyond the great lakes, Groseilliers and Radisson in their long persevering ambition looked earnestly to the vast inland sea or bay of Hudson, to be acquired for its fur trade, as they at first hoped, by France; but as they later plotted, when smarting under the injustice of the governor of Canada and the court of France, it was the motive of Radisson's writings to attain lucrative and commanding positions in the service of English patrons, establishing them in

the commerce of that northern region. It was largely through the efforts of these two French adventurers, alternating in their allegiance between the great rival powers of France and England, that the Hudson Bay Company was founded, in 1670, and grew in the next two decades to be an important ally of the English colonies and power on this continent.

Reviewing the conduct of these men in their relations to the two governments under which they were thus successively employed, we see good ground for excusing their first defection from France; but their wavering allegiance, three times changed, betokens a selfish and petulant spirit, rather than a noble loyalty to either their native or their adopted country. The high-handed seizure by Radisson, in 1684, of the French post on Hayes river commanded by his nephew, though enriching the English, was the work of a despised traitor, and it failed to win either a large pecuniary reward or the respect of the Hudson Bay Company. It brought the distinction of being considered by the king of France as a dangerous enemy.

Groseilliers is supposed to have died at his Canadian home, refusing the overtures for going back to a second residence and service with the English. Radisson, having married an Englishwoman, spent many years there in obscurity, until his death, as a pensioner of this great commercial company. They each possessed in a very full degree the qualities of sympathetic comradeship, coolness and courage in dangers, cheerful endurance of hardships, and fondness for adventure and life in the wilderness, which insured success for the French and Scotch voyageurs, where the different temperaments of English or German colonists would have made any attempt by them to act the same part as pioneer explorers and traders a dismal failure. They contributed to the founding of New France, which reached from the Gulf of St. Lawrence to the Great Lakes, and down the Mississippi to its mouth; but in all that domain which they and their compatriots discovered and won for the mother country, she now retains no possession.

TO WHOM BELONGS THE HONOR OF DISCOVERY OF THE UPPER MISSISSIPPI RIVER AND MINNESOTA?

Not much of thanks or praise can be awarded to Groseilliers and Radisson for their being the earliest Europeans on the upper Mississippi river, and in the area of Minnesota; for they failed to discern the important geographic significance of the great river, and designedly concealed from their countrymen, so far as possible, all knowledge of their travels. If we may compare this inland region with the much grander discovery of the continent, the expeditions of these first pioneers seem somewhat like the unfruitful voyages of the old Northmen, reaching our northern shores but not understanding the value of their work, long before the purposeful first voyage of Columbus, which, though indeed with the belief that the islands found were merely outliers of Farther India, gave to civilization a new hemisphere. With similar intelligence and patriotism came Joliet and Marquette, to whom, second on the upper Mississippi, in 1673, belongs rightly, as I believe, the highest honor of its discovery, because they made known what they found. Let the glory of praise and gratitude, which during more than two hundred years has been accorded to them, continue with undiminished luster in the minds of future generations. Likewise let the names of Du Luth and of Hennepin and his companions be held in lasting honor for their being the first of white men to make known their explorations in Minnesota.

But we should also commemorate the work, so long concealed from historians, by which Groseilliers and Radisson earlier reached this mighty river and first saw the fair country that nearly two centuries later became our territory and state. The first of white men within the area of this commonwealth, their landing at Prairie island in the spring of 1655, with a large company of Indians, who were met by others of their exiled tribesmen already establishing their homes on the island, is a subject well worthy of the painter's skill, and well deserving to be always kept in mind as one of the grandest scenes in all our

state history. Beside it, in our review of the great stages of progress of Minnesota, we should place the picture of the Treaty of Traverse des Sioux, by which treaty, under Governor Ramsey and Luke Lea, our Territory acquired from the red men so great a part of its area for the white men's farms, towns, and cities, and for all that belongs to the progressing civilization of our Anglo-Saxon people,

"The heir of all the ages, in the foremost files of time."

Chapter VII.

DU LUTH AND HENNEPIN.

EXPLORATIONS OF DU LUTH IN MINNESOTA.

THE next explorer who attained historic renown in aiding to found the dominion and traffic of the French with the Indians in the area of Minnesota was Daniel Greysolon Du Luth, whose name was also often spelled in other ways, as Lu Lhut, Du Lhud, and Du Lud. It seems most suitable in this chapter to adopt the spelling here first given, which, written as a single word, is borne in his honor by the large city of Duluth, built on or near the site of his great convocation of many Indian tribes in the early autumn of 1679.

Harrisse informs us that Du Luth was born at St. Germain-en-Laye, a few miles west of Paris, that he had two brothers who held important positions in Canada, and that he was a cousin of Tonty, who was most intimately associated with La Salle in his explorations of the Great Lakes and the Illinois and Mississippi rivers. After making two voyages to Canada, Du Luth served in the French army in Belgium and was in the battle of Senef, August 11, 1674, but soon afterwards returned to Canada.

Under the noon day shadow of the great church of Notre Dame, in Montreal, a tablet is set, at the northeast corner of Notre Dame and St. Sulpice streets, which reads: "In 1675, here lived Daniel de Gresolon, Sieur Dulhut, one of the Explorers of the Upper Mississippi, after whom the City of Duluth was named."

In the autumn of 1678, with seven Frenchmen, Du Luth made the canoe journey to Lake Superior, for the purpose of exploring the country farther west, occupied by the Sioux and Assiniboines, among whom he spent the next two years, endeavoring to bring them into alliance with the French for fur trading. In the summer of the second year, 1680, Du Luth met Hennepin and his two French companions and secured their liberation from captivity with the Sioux of Mille Lacs.

During several years previous to this far western expedition of Du Luth, many of the young men in the French colonies on the St. Lawrence, attracted by the profits and adventures of trading with the Indians, had left the white settlements, although rigorous laws against such desertion of their homes were enacted. Du Luth was accused of being a leader in this prohibited movement, which is described by Parkman as follows:

> Out of the beaver-trade rose a huge evil, baneful to the growth and the morals of Canada. All that was most active and vigorous in the colony took to the woods, and escaped from the control of intendants, councils, and priests, to the savage freedom of the wilderness. Not only were the possible profits great; but, in the pursuit of them, there was a fascinating element of adventure and danger. The bushrangers, or coureurs de bois, were to the King an object of horror. They defeated his plans for the increase of the population, and shocked his native instinct of discipline and order. Edict after edict was directed against them; and more than once the colony presented the extraordinary spectacle of the greater part of its young men turned into forest outlaws. * * * The famous Du Lhut is said to have made a general combination of the young men of Canada to follow him into the woods. Their plan was to be absent four years, in order that the edicts against them might have time to relent. The intendant Duchesneau reported that eight hundred men out of a population of less than ten thousand souls had vanished from sight in the immensity of a boundless wilderness.

In his own defense from this accusation, Du Luth, having returned to France, addressed the Marquis de Seignelay, Minister of the Marine, giving a report of his formal claims of the French sovereignty and his peace treaties with the Indians to secure this northwestern country for the French fur trade. In the same report he told also of his aid extended to Hennepin and his com-

FATHER HENNEPIN'S MAP OF THE UPPER LAKES, 1697.

panions, rescuing them from the Sioux who had taken them as captives to the vicinity of Mille Lacs, whence Du Luth conducted them by the long canoe voyage down the Mississippi and by way of the Wisconsin and Fox rivers to Green bay and Mackinaw. The original French text of this report was published by Harrisse in 1872. As translated by Shea and published in 1880 in the appendix of his edition of Hennepin's "Description of Louisiana," Du Luth wrote of these grand and patriotic services for France as follows:

After having made two voyages from here to New France, where all the people there were there did not believe it possible to discover the country of the Nadouecioux, nor have any trade with them, both on account of their remoteness, which is more than 800 leagues from our settlements, and because they were generally at war with all kinds of nations, this difficulty made me form the resolution to go among them, a project which I could not then carry out, my affairs having compelled me to return to this country, where after having made the campaign of Franche Comte and the Battle of Senef, where I had the honor of being a gendarme in his Majesty's guard, and squire of the Marquis de Lassay, our ensign, I set out to return to Quebec, where I had no sooner arrived, than the desire which I had already had to carry out this design increased, and I began to take steps to make myself known to the Indians. Who having assured me of their friendship, and in proof thereof given me three slaves, whom I had asked from them only to accompany me, I set out from Montreal with them and seven Frenchmen on the first of September in the year 1678 to endeavor to make the discovery of the Nadouecioux and Assenipoualaks [the Sioux and Assiniboines], who were unknown to us, and to make them make peace with all the nations around Lake Superior, who live under the sway of our invincible monarch.

I do not think that such a departure could give occasion to any one whatever to charge me with having contravened the orders of the King in the year 1676, since he merely forbid all his subjects to go into the remote forests, there to trade with the Indians. This I have never done, nor have I even wished to take any presents from them, although they have repeatedly thrown them to me, which I have always refused and left, in order that no one might tax me with having carried on any indirect trade.

On the 2d of July, 1679, I had the honor to plant his Majesty's arms in the great village of the Nadouecioux, called Izatys, where never had a Frenchman been, no more than at the Songaskitons and Houetbatons, distant six score leagues from the former, where I also planted his majesty's arms, in the same year 1679.

On the 15th of September, having given the Agrenipoulaks as well as all the other northern nations a rendezvous at the extremity of Lake Superior to induce them to make peace with the Nadouecioux, their common enemy, they were all there, and I was happy enough to gain their esteem and friendship, to unite them together, and, in order that the peace might be lasting among them, I thought that I could not cement it better than by inducing the nations to make reciprocal marriages with each other. This I could not effect without great expense. The following winter I made them hold meetings in the woods, which I attended, in order that they might hunt together, give banquets, and by this means contract a closer friendship.

The presents which it cost me to induce the Indians to go down to Montreal, who had been diverted by the Openagaux and Abenakis at the instigation of the English and Dutch, who made them believe that the plague raged in the French settlements, and that it had spread as far as Nipissingue, where most of the Nipissiriniens had died of it, have also entailed a greater expense.

In June, 1680, not being satisfied with having made my discovery by land, I took two canoes with an Indian who was my interpreter and four Frenchmen, to seek means to make it by water. With this view I entered a river [the Brule] which empties eight leagues from the extremity of Lake Superior on the south side, where after having cut some trees and broken about a hundred beaver dams, I reached the upper waters of the said river, and then I made a portage of half a league to reach a lake, the outlet of which fell into a very fine river [the St. Croix], which took me down into the Mississippi. Being there, I learned from eight cabins of Nadouecioux, whom I met, that the Reverend Father Louis Henpin, Recollect, now at the convent of St. Germain, with two other Frenchmen, had been robbed and carried off as slaves for more than 300 leagues by the Nadouecioux themselves.

This intelligence surprised me so much that, without hesitating, I left two Frenchmen with these said eight cabins of Indians, as well as the goods which I had to make presents, and took one of the said Indians, to whom I made a present to guide me with my interpreter and two Frenchmen to where the said Reverend Father Louis was, and as it was a good 80 leagues I proceeded in canoe two days and two nights, and the next day at ten o'clock in the morning I found him with about 1000 or 1100 souls. The want of respect which they showed to the said Reverend Father provoked me, and this I showed them, telling them that he was my brother, and I had him placed in my canoe to come with me into the villages of the said Nadouecioux, whither I took him, and in which, a week after our arrival there, I caused a council to be convened, exposing the ill treatment which they had been guilty of both to the said Reverend Father and to the

other two Frenchmen who were with him, having robbed them and carried them off as slaves, and even taken the priestly vestments of the said Reverend Father. I had two calumets which they had danced to them, returned to them, on account of the insult which they had offered them, being what they hold most in esteem among them to appease matters, telling them that I did not take calumets from people, who after they had seen me and received my peace presents, and been for a year always with Frenchmen, robbed them when they went to visit them.

Each one in the council endeavored to throw the blame from himself, but their excuses did not prevent my telling the Reverend Father Louis that he would have to come with me towards the Outagamys [the Fox Indians], as he did, showing him that it would be to strike a blow at the French nation in a new discovery, to suffer an insult of this nature without manifesting resentment, although my design was to push on to the sea in a west-northwesterly direction, which is that which is believed to be the Red Sea [Gulf of California], whence the Indians who had gone warring on that side gave salt to three Frenchmen whom I had sent exploring, and who brought me said salt, having reported to me that the Indians had told them that it was only twenty days' journey from where they were to find the great lake of which the waters were worthless to drink. This has made me believe that it would not be absolutely difficult to find it, if permission would be given to go there. However, I preferred to retrace my steps, manifesting to them the just indignation which I felt against them, rather than to remain after the violence which they had done to the Reverend Father and the other two Frenchmen who were with him, whom I put in my canoes and brought them back to the Michelimakinak [Mackinaw], a mission of the Reverend Jesuit Fathers, where, while wintering together, I learned that, far from being approved for what I was doing, consuming my property and risking my life daily, I was regarded as the chief of a band, although I never had more than eight men with me. It was not necessary to tell me more to induce me to set out over the ice on the 29th of March in the year 1681, with the said Reverend Father and two other Fernchmen, having our canoe and provisions dragged along, in order to reach our settlements as soon as possible, and to make manifest the uprightness of my conduct, having never been in a humor to wish myself withdrawn from the obedience which is due to the King's orders.

I accordingly proceeded to our settlements three months before the amnesty, which it has pleased his majesty to grant to his subjects who might have contravened his orders, had arrived, but the Intendant was unwilling to hear any request that I might have been able to present to him.

As to the manner in which I lived on my voyage, it would be superfluous for me to expatiate on the subject and to annoy your Grace by a long story, being convinced that thirteen original letters of the Reverend Nouvel, Superior of the Outaouais missions, the Reverend Father Enjelran, missionary of St. Francis de Borgias, the Reverend Father Bailloquet, missionary of Ste. Marie du Sault, and the Reverend Father Pierson, missionary of the Hurons at St. Ignace, all Jesuits, will suffice on the whole to inform your Grace amply and fully.

Like Perrot and Le Sueur in southern Minnesota, Du Luth in the Lake Superior region had great influence among the Indians, which he exerted to promote peace and to prevent them from alliances in trade with the English of Hudson bay. In the winter of 1683-84 he was at a trading post on or near the site of Fort William and Port Arthur; and the next June he was at Lake Nipigon, as also again in 1686.

From his experience with the Indians, Du Luth advised the prohibition of the sale of intoxicating liquor to them, as is shown by the following certificate, which is still preserved in the early French Archives of Canada:

I certify that at different periods I have lived almost ten years among the Ottawa nation, from the time that I made an exploration to the Nadouecioux people, until Fort Saint Joseph was established by order of the Monsieur Marquis Denonville, Governor General, at the head of the Detroit of Lake Erie, which is in the Iroquois country, and which I had the honor to command.

During this period I have seen that the trade in eau de vie [brandy] produced great disorders, the father killing the son, and the son throwing his mother into the fire; and I maintain that, morally speaking, it is impossible to export brandy to the woods and distant missions, without danger of its producing misery.

The late Judge John R. Carey, of Duluth, in a paper published by the Minnesota Historical Society, summed up his estimation of Duluth as follows: "Suffice it to say that he was a leader of men, a man of unblemished moral character and undaunted courage, a hater of the whisky traffic among the Indians, a resolute and true soldier, and a fearless supporter and vindicator of law and order."

Vaudreuil, the governor of Canada, in a colonial report to France, dated at Quebec the first of May, 1710, mentioned the

death of Du Luth laconically, but with high appreciation of his character: "Captain Du Lud died this winter; he was a very honest man."

The exact date of Du Luth's death, in the night of February 25-26, 1710, at his rented home on the site of No. 60 St. Paul Street, Montreal, and many particulars of his life and achievements, and especially of his last days and his will, recently found, are given by William McLennan in a very interesting paper read May. 19, 1903, before the Royal Society of Canada, as published in its Proceedings and Transactions (Second Series, Volume IX, Section II, pages 39-47, 1903). This paper closes with the following estimate of Du Luth: "He was a man of good judgment, of firm resolution, of strong faith and friendship, singularly modest in a day when self-assertion seemed a necessity for recognition; a man who under constant disappointment and great physical suffering was supported by a marvellous patience that endured until the hour of release."

EXPLORATIONS OF THE MISSISSIPPI BY JOLIET AND MARQUETTE AND BY LA SALLE.

The knowledge of the upper Mississippi acquired by Groseilliers and Radisson in 1655-56 and 1660 was concealed, as noted in the preceding chapter, though they had seen this river along nearly all its course from the mouth of the Rum river to that of the Wisconsin. Thence southward to the lower Mississippi which had been navigated by the Spaniards in the ill-fated expedition of De Soto and his successor, Moscoso, in 1541 to 1543, there remained a long unexplored section, extending through nine degrees of latitude.

This large central part of the course of the Mississippi was first traversed by white men in the summer of 1673, when the canoes of Louis Joliet, a young but skilled explorer, delegated by Frontenac to this enterprise, and the Christian hero, Father Jacques Marquette, passed down the great river from the Wisconsin to the Arkansas, and returned, partly by the same route, and along the Illinois river, to Lake Michigan. The most south-

ern Indian villages reached by this expedition were Mitchigamea, on the west side of the Mississippi, not far above the White and Arkansas rivers, and Akansea, on the east side, nearly opposite to these large tributaries. As remarked by B. F. French, the former village was perhaps on the site of Aminoya, whence Moscoso descended the Mississippi; and the latter near Guachoya, where De Soto died, but on the opposite shore of the river. With Marquette's exceedingly interesting narrative of this voyage, we have his map, a pen sketch, giving the course of the Mississippi so far as it was seen by him, and marking its chief affuents, the Des Moines, Missouri, and Arkansas, on the west, and the Wisconsin, Illinois, and Ohio, on the east.

Joliet and Marquette turned back at Akansea, through fear of Spaniards or the Indian tribes beyond. They had gone far enough to prove the Mississippi a tributary of the Gulf of Mexico; to discover its vast prairies as a most fertile country, abounding with buffalo herds; and to learn of many aboriginal tribes, among whom these pioneers went as friends, opening the way for founding trading posts and Christian missions. Through their narratives and maps, it soon became known to their countrymen that the Mississippi basin was an unclaimed empire, well worthy of every effort to secure it for France.

The whole country of the Mississippi, from the Gulf to the lakes forming its sources, was christened Louisiana, for the French monarch, and claimed for his sovereignty, by Robert Cavelier, commonly known, under a title referring to his land estate, as the Sieur de la Salle, who, on the great southern prairies, commanded a small company of zealous explorers. La Salle did not know very definitely of the previous Spanish explorations by Pineda, Narvaez, and De Soto and Moscoso; and he deliberately ignored them, so far as they might confer upon Spain any rights of territorial ownership. He thought that the great river named by the Spaniards the Rio del Espiritu Santo (River of the Holy Spirit) might lie east of the one which he followed to the sea.

Leaving the Illinois river February 13th, 1682, La Salle and his company of about fifty French and Indians proceeded

JOLLIET AND MARQUETTE DISCOVER THE MISSISSIPPI.

slowly down the Mississippi, hunting and fishing almost every day to supply themselves food, and visiting with the numerous Indian tribes. April 6th they arrived at the head of the passes, or branches of the river, in the delta, where the mighty stream divides into three channels, each of which was examined and reported to be suitable for navigation,

The proudest hour in the life of La Salle, among all his great efforts for the glory of France and extension of her dominion, was when, on the ninth day of April, 1682, at the mouth of the Mississippi, or River Colbert, he erected a wooden column and a cross, affixing upon the column the arms of France, with an inscription, "Louis the Great, King of France and of Navarre, Reigns." The Te Deum and other hymns of thanksgiving and loyalty were sung, and La Salle proclaimed, in a loud voice, that he took possession of the vast geographic basin drained by the Mississippi for the King of France, while his lieutenant, Tonty, Father Membré, and twenty other Frenchmen shouted, "Vive le Roi." La Salle called the new realm Louisiane. The greater part of it, lying west of the Mississippi, was purchased from Napoleon by the United States in 1803, under the name Louisiana, including the western two-thirds of the area of Minnesota.

Accounts of this expedition were written by La Salle, Tonty, and Membré, and in recent times much biographic information concerning La Salle has been published by Sparks, Parkman, and Margry; but no map of the Mississippi drafted at that time has come down to us. In following all the winding course of the river, it would indeed have been a very difficult task to map it with general accuracy. It was thought to trend westward so that its mouths would not coincide with the River Espiritu Santo of the Spanish coastal charts, but rather with some other of the several rivers entering the gulf farther west.

Two years before La Salle's exploration of the Mississippi in its lower course, he had sent a canoe party of three Frenchmen from his Fort Crévecoeur on the Illinois, to explore upward from the mouth of that river. The party consisted of Michael Accault

(or Ako), the leader; Anthony Auguelle, who was a native of Picardy; and Father Louis Hennepin, a Franciscan missionary, who became the historian of the expedition.

BIOGRAPHIC SKETCH OF HENNEPIN.

Louis Hennepin was born in Belguim about the year 1640. He entered the order of the Recollects of St. Francis, probably in his early youth; spent many years in services of that order in France, Belgium, Holland, Italy, and Germany; and was present, as a regimental chaplain, at the battle of Senef, in 1674. The next year he sailed to Canada, in the same ship with Laval, the bishop of the newly established see of Quebec, and La Salle, destined to be the greatest explorer of New France, arriving at Quebec in September. In 1678 Hennepin joined La Salle's expedition for exploration of lakes Ontario, Erie, Huron, and Michigan, and the Illinois and Mississippi rivers.

After his travels, to be partly here narrated, Hennepin returned to France, probably in the autumn of 1681. His first book, "Description of Louisiana," dedicated to the King of France, was issued in Paris in 1683; and within the next six years translations of it were published in Italian, Dutch, and German. His second book, "New Discovery of a very great Country, situated in America," was published in French at Utrecht, Holland, in 1697, with dedication to the King of England. Within the next forty years seven other French editions of this work appeared; and it was translated into Dutch, German, Spanish, and English. The fraudulent addition to this second work, wherein it is asserted that Hennepin voyaged down the Mississippi to its mouth in 1680, previous to his voyage north into the area of Minnesota, will be considered in a later part of this chapter.

It is not known when or where Hennepin died; but it was after the first of March, 1701, under which date he was mentioned in a letter from Rome, as being then in a convent in that city.

TRAVELS OF HENNEPIN ON THE UPPER MISSISSIPPI.

The exploring party sent by La Salle to the upper Mississippi, namely, Accault, Auguelle, and Hennepin, started from Fort Crévecoeur on the last day of February, 1680, taking in their large canoe of birch bark about a thousand livres' value of goods for presents among the tribes that they would meet. In a week they paddled down the Illinois to its mouth, where they were detained by floating ice in the Mississippi until the 12th of March. When nearly a month had been spent in the upward journey on the Mississippi, they were met in the afternoon of April 11th by a war party of a hundred and twenty Dakota or Sioux Indians, in thirty-three canoes, who made the Frenchmen captives. The Sioux had planned an attack against the Miamis, but, being informed by Hennepin that their Miami enemies had crossed the Mississippi and were beyond their reach, they now turned back and brought their French captives up the river to the vicinity of our present city of St. Paul. Here leaving the river, they went by land northward to the villages of this Isanti tribe of the Sioux in the region of Mille Lacs, where they arrived early in May and held the Frenchmen in captivity until the beginning of July.

Permission was then given to Hennepin and Auguelle, the Pickard, to return in a canoe down the Mississippi to the mouth of the Wisconsin river, where they hoped to find a reinforcement of Frenchmen, with ammunition and other goods, which La Salle had promised to send. Meanwhile Accault was left in captivity. On this return voyage, Hennepin and his comrade passed the falls of St. Anthony, to which he gave this name. They were the first white men known to have seen these falls, now the center of the largest city of Minnesota. About a week later, Hennepin was overtaken, before reaching the Wisconsin river, by some of the Isanti warriors, who themselves went forward to the mouth of the Wisconsin, in hope to meet the French and seize their goods, but found no one there.

Afterward the Indians and the Frenchmen hunted buffalo and started again up the Mississippi, when, late in July, they met Du Luth and several French soldiers, who had come from Lake Superior by the canoe route of the Brulé and St. Croix rivers. They all then came back to the Isanti villages near Mille Lacs, where Du Luth the previous year had met these savages in council and endeavored to inform them of the benefits they would receive in trading with the French. Du Luth sharply reprimanded the savages for their captivity of Hennepin and his companions, who thenceforward had no reason to complain of their treatment. In the autumn, on pretense of bringing goods to establish a trading post, Du Luth, Hennepin, and the other Frenchmen, were allowed to depart, voyaging from Mille Lacs down the Rum river (called the St. Francis by Hennepin) and the Mississippi to the Wisconsin river, and thence up that stream and over portages to Green bay. For this journey the chief of the Isanti tribe traced the route on a paper and marked its portages, this being probably the earliest mapping of any part of Minnesota.

The travels and captivity of Hennepin are very interestingly related by Parkman in two chapters of his "La Salle and the Discovery of the Great West," based on Hennepin's narration in his "Description of Louisiana." It will be best for us to present here Hennepin's own words from this first book written by him, published in 1683, quoting from its translation by John Gilmary Shea, which was published in 1880, with dedication to Archbishop Ireland and the late John Fletcher Williams, who were respectively the president and secretary of the Minnesota Historical Society.

Parts of the narration of Hennepin, describing the upper Mississippi and the captivity in Minnesota, are as follows:

I offered to undertake this voyage to endeavor to go and form an acquaintance with the nations among whom I hoped soon to settle in order to preach the faith. The Sieur de la Salle told me that I gratified him. He gave me a peace calumet and a canoe with two men, one of whom [Anthony Auguelle] was called the Pickard du Gay, who is now in Paris, and the other Michael Ako. He entrusted this latter with some goods intended to make presents, which were worth a thou-

sand or twelve hundred livres, and he gave me ten knives, twelve awls, a small roll of tobacco, to give the Indians, about two pounds of black and white beads, and a small package of needles, assuring me that he would have given me more, if he had been able. In fact he is very liberal to his friends.

* * * We set out from Fort Crevecoeur the 29th of February, 1680. * * * The river Seignelay [the Illinois], on which we were sailing, is as deep and broad as the Seine at Paris, and in two or three places widens out to a quarter of a league. * * * On the 7th of March, we found, about two leagues from its mouth, a nation called Tamaroa, or Maroa, composed of two hundred families. * * *

Soon after leaving these Indians, we came to the mouth of the river Seignelay, fifty leagues distant from Fort Crevecoeur, and about a hundred leagues from the great Islinois village. * * *

The ice which floated down from the north kept us in this place till the 12th of March, whence we continued our route, traversing the river and sounding on all sides to see whether it was navigable. * * *

The River Colbert [the Mississippi] * * * runs between two chains of mountains [the valley bluffs], very small here, which wind with the river, and in some places are pretty far from the banks, so that between the mountains and the river there are large prairies, where you often see herds of wild cattle browsing. In other places these eminences leave semicircular spots covered with grass or wood. Beyond these mountains you discover vast plains, but the more we approach the northern side ascending, the earth did not appear to us so fertile, nor the woods so beautiful, as in the Islinois country. * * *

* * * The lake of Tears [since called Lake Pepin] * * * we so named, because the Indians who had taken us, wishing to kill us, some of them wept the whole night, to induce the others to consent to our death. This lake, which is formed by the river Colbert, is seven leagues long, and about four wide. * * *

Continuing to ascend this river, * * * the navigation is interrupted by a cataract which I called the Falls of St. Anthony of Padua, in gratitude for the favors done me by the Almighty through the intercession of that great saint, whom we had chosen patron and protector of all our enterprises. This cataract is forty or fifty feet high, divided in the midle of its fall by a rocky island of pyramidal form. * * *

Lake Buade [Mille Lacs], or Lake of the Issati, is situated about seventy leagues west of Lake Conde [Lake Superior]; it is impossible to go from one to the other by land on account of the marshy and quaggy nature of the ground; you might go, though with difficulty, on the snow in snowshoes; by water there are many portages and it is a hundred and fifty leagues, on account of the many turns to be

made. From Lake Conde, to go conveniently in canoe, you must pass by Tomb river [the St. Croix]. * * *

In the neighborhood of Lake Buade are many other lakes, whence issue several rivers, on the banks of which live the Issati, Nadouessans, Tinthonha (which means prairie-men), Oudebathon River People, Chongaskethon (Dog or Wolf tribe, for chonga among these nations means dog or wolf), and other tribes, all which we comprise under the name Nadonessiou. These Indians number eight or nine thousand warriors, very brave, great runners, and very good bowmen. It was by a part of these tribes that I and our two canoemen were taken in the following way.

We scrupulously said our morning and evening prayers every day on embarking, and the Angelus at noon. * * * In this way we begged of God to meet these Indians by day, for when they discover people at night, they kill them as enemies, to rob those whom they murder secretly of some axes or knives which they value more than we do gold and silver; they even kill their own allies, when they can conceal their death, so as afterward to boast of having killed men, and thus pass for soldiers.

We had considered the river Colbert with great pleasure, and without hindrance, to know whether it was navigable up and down: we were loaded with seven or eight large turkeys, which multiply of themselves in these parts. We wanted neither buffalo nor deer, nor beaver, nor fish, nor bear meat, for we killed those animals as they swam across the river.

Our prayers were heard when, on the 11th of April, 1680, at two o'clock in the afternoon, we suddenly perceived thirty-three bark canoes, manned by a hundred and twenty Indians, coming down with extraordinary speed, to make war on the Miamis, Islinois, and Maroha. These Indians surrounded us, and while at a distance discharged some arrows at us; but as they approached our canoe the old men, seeing us with the calumet of peace in our hands, prevented the young men from killing us. These brutal men, leaping from their canoes, some on land, others into the water, with frightful cries and yells approached us, and as we made no resistance, being only three against so great a number, one of them wrenched our calumet from our hands, while our canoe and theirs were made fast to the shore. We first presented them a piece of Petun or French tobacco, better for smoking than theirs, and the eldest among them uttered these words, Miamiha, Miamiha. As we did not understand their language, we took a little stick, and, by signs which we made on the sand, showed them that their enemies, the Miamis whom they sought, had fled across the river Colbert to join the Islinois; when they saw themselves discovered and unable to surprise their enemies, three or four old men, laying their hands on my head, wept in a lugubrious tone, and I with a wretched

handkerchief I had left, wiped away their tears. These savages would not smoke our peace-calumet. They made us cross the river with great cries, which all shouted together with tears in their eyes; they made us paddle before them, and we heard yells capable of striking the most resolute with terror. After landing our canoe and our goods, some parts of which they had already stolen, we made a fire to boil our kettle; we gave them two large wild turkeys that we had killed.

These savages having called their assembly to deliberate on what they were to do with us, the two head chiefs of the party, approaching, showed us by signs that the warriors wished to tomahawk us. This compelled me to go to the war chiefs with one of my men, leaving the other by our property, and throw into their midst six axes, fifteen knives, and six fathom of our black tobacco; then bowing down my head, I showed them, with an axe, that they might tomahawk us, if they thought proper. This present appeased several individuals among them, who gave us some beaver to eat, putting the three first morsels into our mouth according to the custom of the country, and blowing on the meat which was too hot, before putting their bark dish before us, to let us eat as we liked. We spent the night in anxiety, because before retiring at night they had returned us our peace-calumet. * * * In our uncertainty, we watched one after the other, so as not to be surprised asleep.

In the morning, April 12th, one of their captains named Narrhetoba, with his face and bare body smeared with paint, asked me for our peace-calumet, filled it with tobacco of his country, made all his band smoke first, and then all the others who plotted our ruin. He then gave us to understand that we must go back with them to their country, and they all turned back with us, having thus broken off their voyage. I was not sorry in this conjuncture to continue our discoveries with these people. But the greatest trouble I had was, that I found it difficult to say my office [daily portion of the breviary] before these savages, many of whom seeing me move my lips said, in a fierce tone, Ouackanche; and as we did not know a word of their language, we believed that they were angry at it. Michael Ako, all out of countenance, told me that if I continued to say my breviary we should all three be killed, and the Pickard begged me at least to conceal myself for my devotions, so as not to provoke them further. I followed the latter's advice, but the more I concealed myself, the more I had the Indians at my heels, for when I entered the wood, they thought I was going to hide some goods under ground, so that I never knew on what side to turn to pray, for they never let me out of sight. This obliged me to beg pardon of my two canoemen, assuring them that I ought not dispense with saying my office, that, if we were massacred for that, I should be the innocent cause of their death, as well as of my own. By the word Ouackanche [Wakan-de, "this is

wonderful or supernatural"], these savages meant that the book I was reading was a spirit, but by their gesture they nevertheless showed a kind of aversion, so that, to accustom them to it, I chanted the Litany of the Blessed Virgin in the canoe with my book open. They thought that the breviary was a spirit which taught me to sing for their diversion, for these people are naturally fond of singing.

The outrages done us by these Indians during our whole route were incredible, for seeing that our canoe was much larger and more heavily laden than theirs (for they have only a quiver full of arrows, a bow, and a wretched dressed skin, to serve two as a blanket during the night, which was still pretty cold at that season, always going north), and that we could not go faster than they, they put some warriors with us to help us row, to oblige us to follow them. These Indians sometimes make thirty or forty leagues by water, when at war and pressed for time, or anxious to surprise some enemy. Those who had taken us were of different villages and of different opinions as to us; we cabined every night by the young chief who had asked for our peace-calumet, and put ourselves under his protection; but jealousy arose among these Indians, so that the chief of the party, named Aquipaguetin, one of whose sons had been killed by the Miamis, seeing that he could not avenge his death on that nation which he sought, turned all his rage on us. He wept through almost every night him he had lost in war, to oblige those who had come out to avenge him, to kill us and seize all we had, so as to be able to pursue his enemies; but those who liked European goods were much disposed to preserve us, so as to attract other Frenchmen there and get iron, which is extremely precious in their eyes; but of which they knew the great utility only when they saw one of our French canoemen kill three or four wild geese or turkeys at a single gun shot, while they can scarcely kill even one with an arrow. * * *

We had some design of proceeding down to the mouth of the river Colbert, which more probably empties into the Gulf of Mexico than into the Red sea [gulf of California]; but these tribes, that seized us, gave us no time to sail up and down this river.

We had made about two hundred leagues by water since our departure from the Islinois, and we sailed with these Indians who took us during nineteen days, sometimes north, sometimes northwest, according to the direction which the river took. By the estimate which we formed, since that time, we made about two hundred and fifty leagues, or even more, on Colbert river; for these Indians paddle with great force, from early in the morning till evening, scarcely stopping to eat during the day. To oblige us to keep up with them, they gave us every day four or five men to increase the paddling of our little vessel, which was much heavier than theirs. Sometimes we cabined when it rained, and when the weather was not bad we slept on the ground without

any shelter. We had all the time to contemplate the stars and the moon when it shone. Notwithstanding the fatigue of the day, the youngest of these Indian warriors danced the calumet to four or five of their chiefs till midnight. * * * Notwithstanding the force of their yelling, the fatigue of the day, the watching by night, the old men almost all awoke at daybreak for fear of being surprised by their enemies. As soon as dawn appeared one of them gave the cry, and in an instant all the warriors entered their bark canoes, some passing around the islands in the river to kill some beasts, while the most alert went by land to discover whether any enemy's fire was to be seen. It was their custom always to take post on the point of an island for safety sake, for their enemies have only periaguas, or wooden canoes, in which they cannot sail as fast as they do, on account of the weight of their craft. Only northern tribes have birch to make bark canoes; the southern tribes who have not that kind of tree, are deprived of this great convenience. * * *

During one of these nineteen days of our very painful navigation, the chief of a band, by name Aquipaguetin, resolved to halt about noon in a large prairie; having killed a very fat bear, he gave a feast to the chief men, and after the repast all the warriors began to dance. Marked in the face, and all over the body, with various colors, each being distinguished by the figure of different animals, according to his particular taste or inclination; some having their hair short and full of bear oil, with white and red feathers; others besprinkled their heads with the down of birds which adhered to the oil. All danced with their arms akimbo, and struck the ground with their feet so stoutly as to leave the imprint visible. While one of the sons of the master of ceremonies gave each in turn the war-calumet to smoke, he wept bitterly. The father in a doleful voice, broken with sighs and sobs, with his whole body bathed in tears, sometimes addressed the warriors; sometimes came to me, and put his hands on my head, doing the same to our two Frenchmen; sometimes he raised his eyes to heaven and often uttered the word Louis, which means sun, complaining to that great luminary of the death of his son. As far as we could conjecture, this ceremony tended only to our destruction; in fact, the course of time showed us that this Indian had often aimed at our life; but seeing the opposition made by the other chiefs who prevented it, he made us embark again, and employed other devices to get by degrees the goods of our canoemen, not daring to take them openly, as he might have done, for fear of being accused by his own people of cowardice, which the bravest hold in horror.

This wily savage had the bones of some important deceased relative, which he preserved with great care in some skins dressed and adorned with several rows of black and red porcupine quills; from time to time he assembled his men to give it a smoke, and he made us come

several days in succession to cover the deceased's bones with goods, and by a present wipe away the tears he had shed for him, and for his own son killed by the Miamis. To appease this captious man, we threw on the bones of the deceased several fathoms of French tobacco, axes, knives, beads, and some black and white wampum bracelets. In this way the Indian stripped us under pretexts, which we could not reproach him with, as he declared that what he asked was only for the deceased, and to give the warriors. In fact, he distributed among them all that we gave him. By these feints he made us believe that, being a chief, he took nothing for himself, but what we gave him of our own accord. We slept at the point of the lake of Tears, which we so called from the weeping and tears which this chief shed there all night long, or which were shed by one of his sons, whom he caused to weep when tired himself, in order to excite his warriors to compassion, and oblige them to kill us and pursue their enemies to avenge his son's death.

These Indians at times sent their best runners by land to chase the herds of wild cattle on the water side; as these animals crossed the river, they sometimes killed forty or fifty, merely to take the tongue and most delicate morsels, leaving the rest with which they would not burthen themselves, so as to travel more rapidly. * * *

Having arrived on the nineteenth day of our navigation five leagues below the Falls of St. Anthony, these Indians landed us in a bay [probably in the east part of the present city of St. Paul] and assembled to deliberate about us. They distributed us separately, and gave us to three heads of families in place of three of their children who had been killed in war. They first seized all our property, and broke our canoe to pieces, for fear we should return to their enemies. Their own they hid all in some alders to use when going to hunt; and though we might easily have reached their country by water, they compelled us to go sixty leagues by land, forcing us to march from daybreak to two hours after nightfall, and to swim over many rivers. * * *

After five days' march by land, suffering hunger, thirst, and outrages, marching all day long without rest, fording lakes and rivers, we descried a number of women and children coming to meet our little army. All the elders of this nation assembled on our account, * * * one of the principal Issati chiefs gave us his peace-calumet to smoke, and accepted the one we had brought. He then gave us some wild rice to eat, presenting it to us in large bark dishes, which the Indian women had seasoned with whortleberries, which are black berries that they dry in the sun in summer, and are as good as currants. After this feast, the best we had had for seven or eight days, the heads of families who had adopted us instead of their sons killed in war, conducted us separately each to his village, marching through marshes, knee deep in water, for a league, after which the five wives of the one

who called me Mitchinchi, that is to say, his son, received us in three bark canoes, and took us a short league from our starting place to an island where their cabins were. * * *

The day after our arrival, Aquipagnetin, who was the head of a large family, covered me with a robe made of ten large dressed beaver-skins, trimmed with porcupine quills. This Indian showed me five or six of his wives, telling them, as I afterward learned, that they should in future regard me as one of their children. * * *

I often spent wretched hours among these savages; for, besides their only giving me a little wild rice and smoked fish roes to eat five or six times a week, which they boiled in water in earthen pots, Aquipaguetin took me to a neighboring island with his wives and children to till the ground, in order to sow some tobacco seed, and seeds of vegetables that I had brought, and which this Indian prized extremely. Sometimes he assembled the elders of the village, in whose presence he asked me for a compass that I always had in my sleeve; seeing that I made the needle turn with a key, and believing justly that we Europeans went all over the habitable globe, guided by this instrument, this chief, who was very eloquent, persuaded his people that we were spirits, and capable of doing anything beyond their reach. At the close of his address, which was very animated, all the old men wept over my head, admiring in me what they could not understand. I had an iron pot with three lion feet, which these Indians never dared touch, unless their hand was wrapped up in some robe. The women had it hung to the branch of a tree, not daring to enter the cabin where this pot was. I was some time unable to make myself understood by these people, but feeling myself gnawed by hunger, I began to compile a dictionary of their language by means of their children, with whom I made myself familiar in order to learn.

* * * The chiefs having regulated the places for hunting the buffalo, they dispersed in several bands so as not to starve each other. Aquipaguetin, one of the chiefs, who had adopted me as his son, wished to take me to the west with about two hundred families; I made answer that I awaited spirits (so they called Frenchmen), at the river Ouisconsin [Wisconsin], which empties into the river Colbert, who were to join me to bring them merchandise, and that if he chose to go that way, I would continue with him; he would have gone there but for those of his nation. In the beginning of July, 1680, we descended in canoe southward with the great chief named Ouasicoude, that is to say, the Pierced-pine, with about eighty cabins, composed of more than a hundred and thirty families, and about two hundred and fifty warriors. Scarcely would the Indians give me a place in their little craft, for they had only old canoes. They went four days' journey lower down to get birch bark to make some more. * * *

Four days after our departure for the buffalo hunt, we halted eight leagues above the Falls of St. Anthony of Padua on an eminence opposite the mouth of the river St. Francis [Rum river]; here the Indian women made their canoe frames, while waiting for those who were to bring bark to make canoes. The young men went to hunt stag, deer, and beaver, but killed so few animals, for such a large party, that we could very rarely get a bit of meat, having to put up with a broth once in every twenty-four hours. The Pickard and myself went to look for haws, gooseberries, and little wild fruit, which often did us more harm than good when we ate them; this obliged us two to go alone, as Michael Ako refused, in a wretched canoe to Oviscousin river, which was more than a hundred leagues off, to see whether the sieur de la Salle had not sent to that place a reinforcement of French men, with powder, lead, and other munitions, as he had promised us on our departure from the Islinois.

The Indians would not have suffered this voyage, had not one of the three remained with them; they wished me to stay, but Michael Ako absolutely refused. Our whole stock was fifteen charges of powder, a gun, a wretched little earthen pot which the Indians had given us, a knife, and a beaver robe, to travel about two hundred leagues, thus abandoning ourselves to Providence. As we were making the portage of our canote at the Falls of St. Anthony of Padua, we perceived five or six of our Indians who had taken the start; one of them had climbed an oak opposite the great fall where he was weeping bitterly, with a well-dressed beaver robe, whitened inside and trimmed with porcupine quills, which this savage was offering as a sacrifice to the falls, which is in itself admirable and frightful. I heard him while shedding copious tears say, addressing this great cataract: "Thou who art a spirit, grant that the men of our nation may pass here quietly without accident, that we may kill buffalo in abundance, conquer our enemies, and bring slaves here, some of whom we will put to death before thee; the Messenecqz (so they call the [Fox] tribe named by the French Outouagamis) have killed our kindred, grant that we may avenge them." In fact, after the heat of the buffalo-hunt, they invaded their enemies' country, killed some, and brought others as slaves. If they succeed a single time, even after repeated failures, they adhere to their superstition. This robe offered in sacrifice served one of our Frenchmen, who took it as we returned. * * *

During sixty leagues that we sailed down the river, we killed only one deer, swimming across, but the heat was so great that the meat spoiled in twenty-four hours. This made us look for turtles, which we found hard to take, as their hearing is so acute that, as soon as they hear the least noise, they jump quickly into the water. * * * Never have we more admired God's providence than during this voyage, for we did not always find deer, and could not kill them

when we would; but the eagles, which are very common in these vast countries, sometimes dropped from their claws bream, or large carp, which they were carrying to their nests. Another time we found an otter on the bank of the river Colbert eating a large fish [a shovel-nosed sturgeon], which had, running from the head, a kind of paddle or beak, five fingers broad and a foot and a half long, which made our Pickard say that he thought he saw a devil in the paws of that otter: but his fright did not prevent our eating this monstrous fish, which we found very good.

While seeking the Oviscousin river, Aquipaguetin, that savage father, whom I had left, and whom we believed more than two hundred leagues away, suddenly appeared with ten warriors, on the 11th of July, 1680. We believed that he was coming to kill us, because we had left him, with the knowledge indeed of the other Indians, but against his will. He first gave us some wild rice, and a slice of buffalo meat to eat, and asked whether we had found the Frenchmen who were to bring us goods; but not being satisfied with what we told him, he started before us, and went himself to Oviscousin to try and carry off what he could from the French; this savage found no one there, and came and rejoined us three days after. * * *

All the Indian women hid their stock of meat at the mouth of Buffalo river [the Chippewa river, in Wisconsin, close below Lake Pepin], and in the islands, and we again went down the river Colbert about eighty leagues' way to hunt with this multitude of canoes; from time to time the Indians hid their canoes on the banks of the river and in the islands; then struck into the prairies seven or eight leagues beyond the mountains [bluffs of the river valley], where they killed, at different times, as many as a hundred and twenty buffaloes. They always left some of their old men on the tops of the mountains to be on the lookout for their enemies. * * *

On the 25th of July, 1680, as we were ascending the river Colbert, after the buffalo-hunt, to the Indian villages, we met the Sieur de Luth, who came to the Nadoussious, with five French soldiers; they joined us about two hundred and twenty leagues distant from the country of the Indians who had taken us; as we had some knowledge of their language, they begged us to accompany them to the villages of those tribes, which I did readily, knowing that these Frenchmen had not approached the sacraments for two years. The Sieur de Luth, who acted as captain, seeing me tired of tonsuring the children, and bleeding asthmatic old men to get a mouthful of meat, told the Indians that I was his elder brother, so that, having my subsistence secured, I labored only for the salvation of these Indians.

We arrived at the villages of the Issati on the 14th of August, 1680. I found our chalice and our papers still there, which I had hidden in the ground; the tobacco which I had planted, had been choked by the

weeds; the turnips, cabbages, and other vegetables were of extraordinary size. The Indians durst not eat them. * * *

Toward the end of September, having no implements to begin an establishment, we resolved to tell these people that, for their benefit, we would have to return to the French settlements. The great chief of the Issati or Nadouessiouz consented, and traced in pencil on a paper I gave him, the route we were to take for four hundred leagues of the way. With this chart we set out, eight Frenchmen, in two canoes, and descended the rivers St. Francis and Colbert. Two of our men took two beaver-robes at the Falls of St. Anthony of Padua, which these Indians had hung in sacrifice on the trees.

We stopped near Ousconsin river to smoke some meat. * * * We found that river as wide as the Seignelay, with a strong current. After sailing up sixty leagues, we came to a portage of half a league, which the Nadonessiouz chief had marked for us; we slept there to leave marks and crosses on the trunks of the trees. The next day we entered a river [the Fox river] which winds wonderfully, for after six hours' sailing we found ourselves opposite the place where we had embarked. * * *

We passed four lakes, two of them pretty large, on the banks of which the Miamis formerly lived. We found Maskoutens, Kikapous, and Outaougamy there, who plant Indian corn for their subsistence. All this country is as fine as that of the Islinois.

We made a portage at a rapid called the Cakalin, and after about four hundred leagues' sail from our leaving the country of the Issati and Nadouessious, we arrived safely at the extremity of the bay of the Puans [Green bay], where we found Frenchmen trading with the Indians contrary to orders. * * *

One of our Frenchmen gave a gun for a canoe larger than ours, with which, after sailing a hundred leagues in the Bay of the Puants, we reached Missilimakinac [Mackinaw], where we were obliged to winter. To employ the time usefully, I preached every holy day, and on the Sundays of Advent and Lent. The Outtaouctz and Hurons were often present, rather from curiosity than from any inclination to live according to our Christian maxims. These last Indians said, to us speaking of our discovery, that they were men, but that we Frenchmen were spirits, because, had they gone so far as we had, the strange nations would have killed them, while we went fearlessly everywhere.

Not to make the foregoing quotations too long, less important parts of Hennepin's complete narration are omitted, some of which may be here briefly mentioned.

In his geographic description of the Mississippi and its tributaries, the St. Croix is called Tomb river, this name being

given, as Hennepin relates, "because the Issati left there the body of one of their warriors, killed by a rattlesnake, on whom, according to their custom, I put a blanket. This act of humanity gained me much importance by the gratitude displayed by the men of the deceased's tribe, in a great banquet which they gave me in their country, and to which more than a hundred Indians were invited." Such honor to the captive missionary for his kind act done during the return from the buffalo hunting, after the arrival of Du Luth and his men, indicates, like many other incidents throughout the narration, that Hennepin and his two comrades were generally not treated harshly by their captors, but rather with much friendliness. Du Luth, in his visit with these Indians a year earlier, had well informed them of the benefits they would obtain by trading their furs for the goods brought by white men.

Several geographic names used by Hennepin were given to commemorate leading men in civil and military affairs in France. Thus the Mississippi was then called the River Colbert, in honor of the great French statesman who died in 1683; but the later work by Hennepin, published in 1697, named and mapped this river as "Le Grand Fleuve Meschasipi." The Illinois river received the name of the Marquis de Seignelay, the Minister of Marine of France, who was a son of the elder Colbert. Lake Buade, later called Mille Lacs, bore the family name of Count Frontenac, who was governor of Canada from 1672 to 1682, and again from 1689 to 1698; and Lake Superior was called Lake Condé, for the great Prince de Condé, who died in 1686, a very distinguished French general, belonging to a family renowned through several generations for illustrious military services.

Hennepin became exceedingly fatigued by the long march of five days to the Sioux villages, so that on his arrival he was very weak, at times needing the support of a man on each side to enable him to stand up. One of the Indians, who seemed very old and decrepit, gave him a large calumet to smoke, "and, weeping bitterly," Hennepin writes, "rubbed my head and arms, showing his compassion. * * * There was a bearskin near

the fire, on which he rubbed my thighs, legs, and the soles of my feet, with wild-cat oil." Aquipaguetin, by whom Hennepin was adopted as a son, had a sweating cabin made for him, in which he was sweated and vigorously rubbed three times in a week, restoring him fully to his usual strength.

Visiting the Indians in their cabins, Hennepin one day found a sick girl baby, whom he thought near death. For her salvation he induced the Pickard, Anthony Auguelle, to aid him in her baptism, as a sponsor or witness, and gave her the name Antoinette, in honor of St. Anthony of Padua, the patron of their travels. Hennepin wrapped the baby in a part of an altar cloth of soft linen, and he writes that "she was smiling the next day in her mother's arms, who believed that I had cured her child, but she died soon after to my great consolation." The joy of the missionary is explained by Parkman: "In this he was like the Jesuits, who could find nothing but consolation in the death of a newly baptized infant, since it was thus assured of a paradise which, had it lived, it would probably have forfeited by sharing in the superstitions of its parents."

At two places in his narration, Hennepin tells of seeing an embassy of Indians who came to the Isanti Sioux from tribes of their allies living about five hundred leagues distant westward, and who joined with these Sioux of the Mille Lacs region in a calumet dance. The ambassadors informed the Frenchmen that the Assiniboines were then only seven or eight days distant to the northeast, that is, near the west end of Lake Superior, where they had come also in September of the preceding year, as noted by the report of Du Luth given in the early part of this chapter. "All the other known tribes on the west and northwest," says Hennepin, from the statements of the embassy, "inhabit immense plains and prairies abounding in buffalo and peltries, where they are sometimes obliged to make fire with buffalo dung, for want of wood."

Distances estimated by Du Luth and Hennepin, or reported to them by the Indians, are often somewhat too great, apparently through the considerable exaggeration which may be pardoned to tired travelers; but occasionally, as in the width

noted for Lake Pepin, the distance is proportionally farther increased through deficiency of observation or of memory. Hennepin's estimate of the distance voyaged in the ascent of the Mississippi from the mouth of the Illinois river before meeting the Sioux was about 200 leagues; and from the place of that meeting to where they left this river, at the site of St. Paul, about 250 leagues. The whole distance thus supposed to be about 450 French leagues, or 1,242 English miles, is ascertained by the present very accurate maps to be only 689 miles, following the winding course of the river. If we can truthfully accept the proportional ratio of the estimates of Hennepin, indicating four-ninths of the whole voyage to have been passed when they met the Sioux and were taken captive, that place was near the head of the Rock Island rapids, some fifteen miles above the cities of Rock Island and Davenport, being thus about 150 miles below the mouth of the Wisconsin river.

COMPARISON OF NARRATIONS BY DU LUTH, HENNEPIN, AND LA SALLE.

Three different narrations of the travels of Du Luth and Hennepin in the region of the upper Mississippi, mainly agreeing well with each other, have been preserved and were published together in 1880 by Shea in his edition of Hennepin's "Description of Louisiana." This volume of 407 pages contains a biographic notice of Father Hennepin, with comments on his published works and his personal character, in 45 pages; the translation of Hennepin's first book, from its original Paris edition of 1683, in 299 pages; and an appendix of several other translations from old French books and manuscripts, relating to Hennepin's travels. The narration by Du Luth, presented in the first part of this chapter, forms pages 374 to 377 in this volume; the extensive quotations which we have made from Hennepin's own writing are in its pages 190 to 260; and a third account of this expedition and the country seen by Hennepin and his two companions, written by La Salle in a very long letter dated at Fort Frontenac, near the mouth of Lake Ontario, August 22, 1682, is given in pages 361 to 371.

The letter of La Salle, in the original French, was published by Pierre Margry at Paris in 1877, in the second volume of his collection of early documents concerning the discoveries and settlements of the French in the west and south parts of North America. Besides Shea's translation of the part of this letter narrating the explorations of Hennepin and Du Luth, another translation of the same part was published by Prof. N. H. Winchell in 1884 in the first chapter of Volume I of his Final Report on the Geological and Natural History Survey of Minnesota.

It is distinctly stated by Du Luth that Hennepin and his two associates were made captives and slaves by the Sioux, as Hennepin also tells us; so that we cannot doubt that this little party of explorers, from the day of their meeting the great expedition of Sioux warriors, were compelled to journey with them to their villages. The Frenchmen continued under such relationship of restraint, oversight, and occasional compulsion to manual toil, that Hennepin regarded it as a kind of servitude, until the resolute reprimands of Du Luth persuaded the savages to accord more respectful and generous treatment to their former captives. The banquet which Hennepin represents to have been voluntarily given in his honor, on account of his friendly act in covering with a blanket the dead and wasting remains of an Isanti warrior at the Tomb river, was probably a part of the proceedings of an Indian council mentioned by Du Luth as brought together by himself, a week after his arrival at the villages of the Sioux, to give him an opportunity of publicly rebuking their conduct toward Hennepin and the other two Frenchmen with him.

La Salle, on the contrary, writing probably according to information supplied by Accault, denied that the Sioux held the Frenchmen in captivity. He disparaged Du Luth, as an outlaw who had spent three years in the region of Lake Superior with a band of twenty French bushrangers. For Accault he had warm praise, because of his prudence, courage, and success in dealings with various Indian tribes, whose languages and usages he knew well, although ignorant of the Sioux language when sent to

that people. To Hennepin, whom Accault heartily disliked, La Salle ascribed the following unenviable reputation of habitual exaggeration and untruthfulness.

> I have deemed it seasonable to give you a narrative of the adventures of this canoe, because I have no doubt it will be spoken of, and if you desire to confer with Father Louis Hempin, Recollect, who has gone back to France, it is necessary to know him somewhat, for he will not fail to exaggerate everything; it is his character; and to myself, he has written me as though he had been all ready to be burned, although he was not even in danger; but he believes that it is honorable for him to act in this way, and he speaks more in keeping with what he wishes than what he knows.

Du Luth wrote that the place where he met Hennepin on the Mississippi was fully eighty leagues below the mouth of the St. Croix; and Hennepin estimated that it was about two hundred and twenty leagues from the country of the Isanti people. Deducting from the latter estimate the sixty leagues of the land trip from the site of St. Paul to the neighborhood of Mille Lacs, we have the distance of about a hundred and sixty leagues below St. Paul, which would put the meeting place much farther south than Du Luth supposed. In view of this discordance, we should perhaps say no more than that the meeting was probably not very distant from the southeast corner of Minnesota. By accepting the ratio between Hennepin's figures given first for the two parts of his northward journey on the Mississippi in the spring and later for the part traveled with Du Luth, and reducing those estimates to the actual distances now known by exact maps, we find the place of the meeting to have been about ten miles below the Wisconsin river, or fifty-five miles, by the course of the Mississippi, southward from the Minnesota and Iowa boundary. A place about eight miles farther south is reached by measuring eighty French leagues, as Du Luth estimated, or 221 English statute miles, down the Mississippi from the St. Croix; and his canoe party could easily cover that distance in paddling two days and two nights and until ten o'clock the next forenoon, with the large aid of the river current.

HENNEPIN'S ROUTE NORTHWARD FROM ST. PAUL.

Many Indian trails, canoe routes, and portages, traversing the country around Mille Lacs, used by the Sioux in Hennepin's time and by the Ojibways after their conquest of that region, have been described by the late Hon. J. V. Brower in his Memoirs of Explorations in the Basin of the Mississippi (Volume III, Mille Lacs, 1900, pages 55, 92; Volume IV, Kathio, 1901, pages 51, 53, 84, 122, 124). He identified the place where the Sioux and the three Frenchmen left the Mississippi, thence going by a land journey, as near the mounds on Dayton's bluff, in the east part of the city of St. Paul. Less than a hundred years later, when Carver was there, this locality was the well known rendezvous of many Sioux tribes for burial of their dead and for a grand yearly council. Hennepin described the place as "a bay," referring probably to the small valley where Phalen creek flows into the Mississippi, forming a gap or embayment in the river bluffs, between the high central part of the city and the somewhat higher area of Dayton's bluff and the Mounds Park.

Journeying thence afoot, the Sioux and their French captives probably passed by Lake Phalen, White Bear and Bald Eagle lake, the several smaller lakes at Centerville, and onward northerly through Anoka, Isanti, and Kanabec counties, to the vicinity of Knife lake and river, where Groseilliers and Radisson had held their council with the Sioux and Crees twenty years before. About twenty-five miles of travel thence toward the northwest by a trail through a magnificent pine forest, on the last day of this journey, brought the Sioux to the most southern of their villages about Mille Lacs, on the several bays of its south shore and on the three small lakes through which the Rum river flows within the first ten miles below the mouth of that much larger lake. The Frenchmen were assigned separately to homes with three of the Sioux warriors, apparently in these southern villages. Others of the Sioux, having violently taken their share of the French merchandise, went farther to their numerous villages, situated on or near the shores of Mille Lacs around all its extent.

This beautiful lake, nearly twenty miles long from south to north, with a width of ten to fifteen miles, was mapped by Franquelin in 1688, probably from information supplied by Du Luth and Hennepin, as surrounded by eighteen villages of the Isanti tribe of the Sioux. Farther from this lake, but within distances of convenient communication, dwelt other Sioux tribes or bands. The Ouadebathon tribe, whom Hennepin calls "River People," shown both on Hennepin's map and the more elaborate map of Franquelin at a considerable distance northeast of Mille Lacs, were quite surely the same as the Houetbatons, mentioned by Du Luth as one of the tribes visited by him in 1679. They probably lived on the Mississippi at Sandy lake, about thirty-five miles northeast of Mille Lacs, and fifty miles west from the site of Fond du Lac, at the west end of Lake Superior. In Du Luth's travel from Lake Superior to Mille Lacs, he probably went or returned by the canoe route of the St. Louis and the East and West Savannah rivers to Sandy lake; and he may also have passed one way by land, following trails noted by Brower, from Lake Superior to the St. Croix and past the headwaters of the Kettle, Snake, and Rice rivers, to the northeast shore of Mille Lacs. On this land route he would probably visit the Songaskitons, the Dog or Wolf tribe, who likewise are mentioned both by Du Luth and Hennepin, living perhaps in the vicinity of Moose and Sturgeon lakes, as we may infer from their position on Franquelin's map, or perhaps Du Luth came to them by a southward detour, to the vicinity of Cross and Pokegama lakes, on the lower part of the Snake river.

Hennepin gives a very picturesque view of the five days' march to the Sioux villages in the first week of May. They traveled, he says, from daybreak until after nightfall. Coming to many streams which were swollen by the late melting of the winter's snow in the woods and by the usual rains at that season, Hennepin was obliged to swim across them, while his Franciscan robe was carried on the head of one of the Indians, many of whom were very tall. Accault and Augelle, who were smaller than Hennepin, could not swim, but were borne across deep streams on the shoulders of Indians. Very thin ice, newly

frozen on the streams and lakes forded, sometimes cut their legs, causing them to bleed profusely; and the Frenchmen were further weakened by fasting, for, on account of scarcity of food, they were grudgingly allowed only one meal daily. "I was so weak," Hennepin writes, "that I often lay down on the way, resolved to die there, rather than follow these Indians who marched on and continued their route with a celerity which surpasses the power of Europeans."

The route of the last day of their toilsome travel was probably from Knife lake northwest to the ancient sites of five Sioux villages mapped by Brower on Sagawamick, South End, and Portage bays of the southern shore of Mille Lacs. We can with much confidence identify the village site of the Sioux and later of the Ojibways on the south side of Portage bay as the place where the Isanti chief and the Frenchmen smoked each other's calumets of peace at the end of the journey. This auspicious ceremony was succeeded by a feast of wild rice and dried blueberries, stewed together and served in large dishes of birch bark, a most welcome repast to the three white men, utterly fatigued and almost famished in their long forced march.

It is noteworthy that Hennepin described Mille Lacs as spreading out into great marshes of shallow water, filled with wild rice, which in its ripening season the Indian women tied into bunches to prevent it being wholly devoured by ducks and other birds. The grain was harvested by being beaten off into canoes.

The plentiful blueberries of this region, and of all northeastern Minnesota, were gathered in large quantities by the Indians and were dried to be thus kept for use on special occasions throughout the year. These dried berries were much prized, both by the Sioux, when they occupied that country, and afterward to the present time by their successors, the Ojibways. The whortleberry, or huckleberry, grows also in that part of our state, but is less abundant.

After the feast, the Frenchmen were separately conducted to the villages of those who had adopted them in the place of their sons killed in war. Accault and Augelle appear to have

been taken eastward to villages on South End bay, while Hennepin at first went southward across the portage, a little more than a mile long, to the northeast part of Onamia lake, the lowest in the series of three lakes on the Rum river within ten miles from the mouth of Mille Lacs. The five wives of Aquipaguetin, who adopted Hennepin as his son, there received him with three canoes and paddled about two miles westward, along the north side of Onamia lake, to that chief's village on "an island."

Brower identified this place as the small tract of firm ground at the west side of Rum river where it flows into Onamia Lake. It is surrounded by the river, the lake, and lower and swampy land, as mapped in his Memoirs of Mille Lac (page 126) and Kathio (page 45). On this "island" an ancient village site of the Sioux is indicated by abundant fragments of their pottery, and the place was therefore named by Brower as "Aquipaguetin Island." No other locality in all this region fits the description given by Hennepin, and we may therefore be quite sure that it was his principal home during his stay in the region of Mille Lacs. It was also possibly the site of the Sioux council and banquet mentioned by both Du Luth and Hennepin as held soon after the return from the buffalo hunt; but more probably that convocation, like the calumet-smoking and feast at the arrival of the Frenchmen, was in the more central and presumably larger Sioux village south of Portage bay.

Whether that was the "great village" in which Du Luth a year previous "had the honor to plant his majesty's arms," allying these Sioux with New France for fur trading, cannot be determined; but it may perhaps quite as probably have been there as at any of the ancient village sites near the mouth of Mille Lacs, about seven miles distant to the northwest, which have been supposed by Winchell, Hill, and Brower, to be the place of Du Luth's ceremonious council in 1679. In coming to this large lake from the south by the usual canoe route of the Rum river, the first accessible part of the entire lake shore was at this village on Portage bay, near the middle of the south end of Mille Lacs, separated from Onamia lake by a portage easily

made by the Indians with their light canoes and little luggage; while conversely it was the most convenient rendezvous and place of departure from the many ancient Sioux villages around Mille Lacs, whenever an expedition down the Rum river was undertaken.

If the march of five days from St. Paul to Mille Lacs, after the middle of spring, with the streams flooded, the winter ice of lakes melted, and many other parts of the route made deeply muddy and difficult by thawing and rains, be compared with the seven days of travel by Groseilliers and Radisson from the council and feasting at or near Knife lake to visit the Prairie Sioux twenty years before and a month earlier, when marshes and lakes were still frozen and easily crossed, we may well believe that longer journey to have reached to the border of the unlimited prairie country in the neighborhood of New Ulm, as was indicated in the preceding chapter. The speed and stress of the Sioux march, which astonished and dismayed Hennepin, would probably have been thought nothing extraordinary by those first explorers of our state, inured to every hardship and privation by many years of sharing the life of the red men.

The Indians informed Hennepin that some of the Thinthonha or Prairie Sioux lived during a part of the year at the foot of a fall of the Mississippi river, reached by canoeing twenty or thirty leagues up that river above the Falls of St. Anthony. This is the Sauk Rapids, at the town of this name. The temporary villages of these Tintonwan bands, migrating from the vast prairie region of southern Minnesota, a week's travel distant, were on the small prairie areas adjoining St. Cloud, on both sides of the Mississippi, about two miles south of Sauk Rapids. The distance from the foot of these rapids to the Falls of St. Anthony, accurately measured along the course of the river, is seventy-seven miles. For many years after the Civil War, steamboats plied regularly, during favorable stages of water, along this distance between Minneapolis and St. Cloud, being restricted by the insuperable obstacles of the falls at each end of that stretch of the river.

FALSE CLAIM OF EXPLORING THE LOWER MISSISSIPPI.

In the "Description of Louisiana," from which the foregoing quotations are taken, Hennepin says that the captivity among the Sioux prevented an exploration of the lower Mississippi to its mouth, which he and his two companions had wished to undertake. The map accompanying this first publication of Hennepin therefore showed the lower and unexplored part of the great river by a dotted line, which has nearly the true course, running to the middle of the north side of the Gulf of Mexico.

But the second work narrating Hennepin's travels, entitled "New Discovery," etc., published fourteen years later, in 1697, contains an account of a purported voyage of these three Frenchmen in their canoe to the mouth of the Mississippi. According to this account, which is inserted with an explanation of its omission from the earlier book, they started south from the mouth of the Illinois river on the 8th of March, 1680; reached the mouth of the Mississippi, which is nearly 1300 miles distant by the course of the river from the Illinois, on the 25th of that month; and, during their return up the Mississippi, left the village of the Akansa Indians on the 24th of April. This village, near the mouth of the Arkansas river, had been the limit of the voyage of Joliet and Marquette in 1673, canoeing down the Mississippi through 622 miles of the winding river course, as exactly known by our present accurate maps, from the Illinois river to the Arkansas. On Hennepin's map in this work, the Mississippi is shown erroneously as flowing into the northwestern part of the Gulf of Mexico, agreeing thus with the mistaken opinion of La Salle, derived from his navigation of its lower part in 1682.

Farther on in the same work, the narration of Hennepin is resumed nearly as in his earlier book, telling of his meeting the Sioux warriors on his voyage up the Mississippi and being taken into captivity by them on the 12th of April, one day later than the date given in the "Description of Louisiana," but sev-

eral weeks earlier than could possibly be consistent with the dates assigned for the pretended trip down the Mississippi and the return.

Not only is it thus falsely claimed that Hennepin explored the lower Mississippi in 1680, two years before the canoe expedition down this river to its mouth by La Salle, but the story thus inserted in Hennepin's second work is made up largely, as shown by Sparks and Parkman, from the journal of Father Zenobe Membré, on his descent of the Mississippi in the expedition of La Salle. The falsity of this part of the "New Discovery," its chronologic inconsistency with other parts of that work and with the earlier "Description of Louisiana," and the plagiarism from Membré, are in very remarkable contrast with the earlier work of Hennepin, which seems to be wholly his own writing and is apparently truthful throughout, excepting occasional mistakes of memory and a tendency to exaggerate the importance of the writer as compared with his associates.

It was therefore suggested by Shea in the preface of his translation of the "Description of Louisiana," and in his biographic sketch of Hennepin, introductory to the same work, that the false and plagiarized narration of a voyage on the lower Mississippi, in the "New Discovery," was inserted by an unscrupulous editor, without Hennepin's consent or knowledge. The same defense of Hennepin was also urged by Archbishop Ireland in his eloquent address at the celebration in Minneapolis on July 3, 1880, of the Bicentenary of Hennepin's discovery of the Falls of St. Anthony (reported in Volume VI, Minnesota Historical Society Collections, pages 29-74).

Later students of the writings and character of Hennepin, however, have agreed with the earlier judgment of Sparks, Parkman, Neill, and others, that it is impossible to absolve Hennepin from falsification, involving the intent to rob La Salle of priority in discovery. It is to be much regretted, if Hennepin was innocent of complicity in these false statements, that we have no record of his denial and remonstrances against them.

When a traveler from America told his story in Europe, there was much temptation to overstep the bounds of truth,

for immediate applause or promotion, without prospect of speedy detection in falsehoods that related to such new and distant countries. Furthermore, the recognized standard of obligation to speak or write only the truth was not then so high and unvarying as it is now; else we should not have the shame that three among the earliest authors who narrate explorations in Minnesota, Radisson, Hennepin, and Lahontan, should each have erred in that direction.

LAHONTAN AND HIS FICTITIOUS LONG RIVER.

This place seems most suitable for a brief reference to the egregious fiction of an exploration in the south part of Minnesota, which became a stumblingblock of historians and geographers, occurring in the very interesting writings of Louis-Armand de Lom d' Arce, the Baron de Lahontan. He was born at the little village of Lahontan, in southwestern France, June 9, 1666. As a soldier of the French colonial army, the young baron came to America in 1683, at the age of seventeen years. His military duty took him to Fort St. Joseph, at the mouth of Lake Huron, and to Mackinac, where he might readily learn from French fur traders and voyageurs so much as he tells us of the upper Mississippi region. After varied fortunes and a very adventurous career of ten years in the service of New France, latest in its province of Newfoundland, Lahontan deserted his post of duty as a trusted officer of the French government in that bleak island province. Henceforward to the end of his life, probably in 1715, he was an exile and wandered in Holland, Denmark, Germany, Spain, and England.

In 1703, at the Hague, Lahontan's narrative of his travels was published in three volumes, written in his native French language. Later in the same year, an English translation of this work, with changes and additions, was issued in London, entitled "New Voyages to North-America." These books, like those of Hennepin, attained a great popularity, and passed through several other French and English editions, a translation into German in 1711, and into the Dutch language in 1739.

American and English readers of today are greatly indebted to Dr. Reuben Gold Thwaites, secretary of the Wisconsin Historical Society, for his recent publications of Hennepin's "New Discovery" and Lahontan's "New Voyages," each reprinted in two volumes from their very rare early English issues, the former being thus published in 1903 and the latter in 1905. In his introductions of these new editions, Thwaites gives extended biographic sketches of Hennepin and Lahontan, with valuable comments on their writings; and bibliographies of each are contributed by Mr. Victor Hugo Paltsits, noting all preceding editions of their works.

It is very improbable that Lahontan ever came into the area of Minnesota, or indeed ever traveled so far westward as to see the Mississippi river; but he impiously exclaims in beginning the Munchausenlike part of his work relating his fictitious journey in the winter of 1688-89, in exploration of an impossibly long river, tributary to the Mississippi from the west in the region of southern Minnesota, "Thank God, I am now return'd from my Voyage upon the Long River, which falls into the River of Missisipi." His descriptions and map of this great stream, of its Indian tribes, and of the country and tribes reported to him beyond the limit of his travel, are wholly a gross and baseless fiction.

Concerning Lahontan's claim to have thus voyaged far west of the Mississippi, Thwaites writes as follows:

> Many hypotheses have been advanced, to account for Lahontan's wilful tale. The theory of interpolation, sometimes applied to Hennepin, has been suggested in this case; but the style of the baron's story of his far Western tour is quite in keeping with that of the entire work—Letters and Dialogue carry, throughout, the evidence of coming from one and the same hand. Others have seen in the narrative of the journey only exaggeration of possible facts, and have sought to identify the fabulous waterway with the St. Peter's (present Minnesota), whose latitude somewhat closely corresponds with Lahontan's River Long. * * * Those who have studied the subject more carefully—such as the baron's latest biographer, Edmond Roy—point out the impossibility of reconciling the pretended voyage with the rest of the author's descriptions. * * *

In Roy's opinion, the impecunious fugitive, eager for quick returns, doubtless thought the unvarnished record of a simple officer, now in disgrace, would attract few buyers for the volume; he must, in order to secure patronage and readers, pose as a discoverer, and imitate the achievements of Marquette and La Salle. Possibly he may have entertained a distant hope of being again despatched to his beloved wilderness, on a mission of further exploration and discovery. In the interior of America he had spent many days with Perrot and Duluth, who knew the West as probably no other white men did. Out of their reports, the published accounts of Membre, La Salle, Marquette, and Hennepin, and chance information received from the Indians, he may have obtained the material for the tale of his marvelous journey, and imposed it upon the public for the sake of gain.

Chapter VIII.

PERROT AND LE SUEUR.

LIKE the happy change from darkness and disturbing dreams to awaking and right seeing in the sunshine of a fair morning, come the less voluminous and less pretentious but unimpeachably and entirely truthful memoirs of Perrot and Le Sueur, the next great pioneers and leaders in commercial and industrial enterprises within the borders of Minnesota.

The work of Perrot indeed belonged mostly to Wisconsin and only to the edge of this state, but he was for many years the foremost fur trader and most influential mediator in all councils among the Indians tribes of this region, his principal trading posts being on the Wisconsin shores of Lake Pepin and of the Mississippi below this lake. Le Sueur, who during several years was an associate with Perrot, traveled far up the Mississippi in central Minnesota, was the first to bring a chief of the Sioux to Lower Canada, and led a great mining expedition in the year 1700 to open mines of a supposed copper ore on the Blue Earth river.

BIOGRAPHIC SKETCH OF PERROT.

Nicolas Perrot was born in 1644; came to New France in his boyhood or youth; spent four or five years in the service of Jesuit missionaries, thus acquiring much knowledge of the Algonquian tribes and their languages; and in 1665, at the age of about twenty-one years, he came to the Pottawatamies in the

region of Green bay, Wisconsin, as a fur trader. Finding that people on the point of going to war against the Menominees, he interposed successfully as a peacemaker. Later he visited the Sac and Fox tribes, the Miamis and Mascoutins, and probably almost every other Indian tribe between Lake Michigan and the Mississippi river, bringing them all into friendly alliance with the French. In the spring of 1670, Perrot and four other Frenchmen returned to Montreal, accompanied by about nine hundred Indians from the upper Great Lakes, their canoes being laden with a large freight of furs.

In the summer and autumn of this year 1670, an important plan was formed by the government of New France to secure acknowledgment of its sovereignty from the many Indian peoples about lakes Huron, Michigan, and Superior. Perrot was selected to summon delegations of these tribes to meet St. Lusson, who was the commissioner for making the ceremonious treaty and proclamation. It was hoped thus to prevent these Indians from trading with the English on Hudson bay.

St. Lusson, Perrot, and their little party of Frenchmen, came from Quebec and Montreal by the usual canoe route of the Ottawa and Mattawa rivers to the north part of Lake Huron late in the autumn. There St. Lusson wintered on Manitoulin island, while Perrot, having first sent invitations to the tribes north of lakes Huron and Superior, went onward to Green bay and thence by Indian messengers notified the tribes throughout Wisconsin and west of Lake Superior. The appointed rendezvous was the Sault Ste. Marie, where on the 14th of June, 1671, the chiefs and other representatives of these Indian nations gave their assent to the proclamation of St. Lusson, that the King of France, Louis XIV, was their sovereign and protector.

After this grand ceremony, Perrot soon returned to Lower Canada, married a wife who had considerable wealth, and resided about ten years at Becancour, near Three Rivers.

During the next eighteen years, from 1681 to 1699, Perrot made numerous western journeys, and indeed lived mostly in the far west, for promoting the interests of the French fur trade with the Indians. He was repeatedly appointed by the colonial

government to positions of authority and leadership, in 1684 securing an alliance of the tribes of Wisconsin for a campaign against the Iroquois, and in the next year averting threatened warfare between the Foxes and the Ojibways.

Probably as early as in 1683, Perrot established a trading post which was named Fort St. Nicholas, on the Mississippi close above the mouth of the Wisconsin river. In 1685 he began to trade more extensively with the Sioux of Iowa and southern Minnesota, for which purpose he built a temporary trading post on the east side of the Mississippi river near Trempealeau, and afterward the post called Fort St. Antoine, which was occupied many years, on the northeastern shore of Lake Pepin about six miles from its mouth. He also had a post on the Minnesota shore of this lake at its outlet, called Fort Perrot; but this was of small importance in comparison with Fort St. Antoine, his most northern post. Farther south than all these trading posts, another was built by Perrot in the vicinity of the present lead mines of Galena and Dubuque, some of which he tested and slightly worked.

In 1687, Perrot joined Durantaye and Tonty in leading a second expedition of the Indian warriors of the west against their dreaded eastern enemies, the Iroquois. In 1689, at Fort St. Antoine, Perrot ceremoniously proclaimed his taking possession, for the King of France, of all the upper Mississippi region inhabited by the Sioux, thus in a formal declaration adding to New France the greater part of the present state of Minnesota. Through the ensuing ten years he was continually active, traveling far and wide between Montreal and the Mississippi, and several times hazarded his life in allaying quarrels among the western tribes and holding them at peace with each other.

After 1699, when Louis XIV. ordered all the western trading posts to be abandoned, recalling the traders and soldiers to Lower Canada, Perrot passed the remainder of his life there, in retirement at his home on the St. Lawrence. It is known that he lived till 1718, but the time of his death is not recorded.

WRITINGS OF PERROT.

The first paper published by the Parkman Club of Milwaukee, in fifteen pages, dated in 1895, by Gardner P. Stickney, entitled "Nicholas Perrot, a Study in Wisconsin History," presents an excellent summary of his career and a brief notice of his writings.

Perrot's manuscripts, listed by Tailhan, were as follows:

I. Memoir on the Outagami or Fox Indians, addressed to the Marquis de Vaudreuil in 1716;

II. Several memoirs, on the wars of the Iroquois against the Illinois and the nations of the upper Great Lakes, and also on the treacheries of the savages and in particular of the Ottawas and Hurons;

III. Memoir on the manners, customs, and religion of the savages of North America.

The third of these works, which mentions the others, is the only one that has been preserved, being published in 1864, in its original French, by the Jesuit Father, Rev. J. Tailhan, with extensive and very useful notes. Of this memoir Mr. Stickney writes:

> Some authorities think that this manuscript was written in Perrot's later years, after his retirement from active life; but Harrisse, whose opinion is entitled to consideration, says that it bears evidence of having been composed year by year from 1665 until his death.
>
> The volume as published is a small octavo of three hundred and eighty-one pages. Perrot's matter fills one hundred and fifty-six pages, Tailhan's notes and index the rest.
>
> The first twelve chapters are devoted to the religious beliefs and superstitions of the Indians; their marriages and funeral ceremonies; their games and hunting customs, and the manner of their daily life.
>
> The following sixteen chapters are more of the nature of a journal, and embrace accounts of various expeditions against the Iroquois, St. Lusson's ceremonies at Sault Ste. Marie, and other actions in which Perrot was concerned, or of which he had immediate knowledge.
>
> Tailhan's notes are excellent. They include long explanatory extracts from the Relations, the Lettres Edifiantes, Charlevoix, Annales de la Propagation de la Foi, and other authorities, corroborative of Perrot's statements.

As might be expected, Perrot's style is rude, and oftentimes involved. Taking Tailhan's notes in connection with the text, however, one cannot help being impressed by Perrot's fidelity to fact, and his modesty, which are assuredly the essentials in a work of this character.

A translation from this memoir of Perrot, giving his account of the western wanderings of the Huron and Ottawa Indians, after they were driven from their homes by the attacks of the Iroquois, has been given in a preceding chapter of the present volume (under "Hurons" in Chapter V). Their settlement for a few years on Prairie island of the Mississippi river, thus narrated by Perrot, is a strong confirmation of my identification of that island as Radisson's "first landing isle."

An interesting paper by the late Alfred J. Hill, of St. Paul, on "The Geography of Perrot, so far as it relates to Minnesota and the regions immediately adjacent," was published in the Minnesota Historical Society Collections, Volume II, pages 200-214, in 1867.

PROCLAMATION AT FORT ST. ANTOINE IN 1689.

The earliest state paper having particular reference to the area of Minnesota was a declaration proclaimed by Perrot at his Fort St. Antoine (Post St. Anthony) on May 8, 1689, which is preserved in the Colonial Archives of France. Its translation by Dr. E. B. O'Callahan, published in 1855 in Documents relating to the Colonial History of the State of New York (Volume IX, page 418), is as follows:

> **Canada, Bay des Puants.**
>
> Record of the taking possession, in his Majesty's name, of the Bay des Puants [Green bay], of the lake and rivers of the Outagamis and Maskoutins [Fox River and Lake Winnebago], of the river Ouiskonche [Wisconsin], and that of the Missiscipi, the country of the Nadouesioux [the Sioux or Dakota Indians], the rivers St. Croix and St. Peter, and other places more remote. 8th May, 1689.

Nicholas Perrot, commanding for the King at the post of the Nadouesioux, commissioned by the Marquis de Denonville, Governor and

Lieutenant General of all New France, to manage the interests of Commerce among all the Indian tribes and peoples of the Bay des Puants, Nadouesioux, Mascoutins and other Western Nations of the Upper Mississipi, and to take possession, in the King's name, of all the places where he has heretofore been, and whither he will go.

We this day, the eighth of May one thousand six hundred and eighty [-nine] do, in presence of the Reverend Father Marest of the Society of Jesus, Missionary among the Nadouesioux; of Monsieur de Borie-Guillot, commanding the French in the neighborhood of Ouiskonche on the Mississipi; Augustin Legardeur Esquire, Sieur de Caumont, and of Messieurs Le Sueur, Hebert, Lemire and Blein;

Declare to all whom it may Concern, that having come from the Bay des Puants and to the lake of the Ouiskonches and to the river Mississipi, we did transport ourselves to the Country of the Nadouesioux on the border of the River Saint Croix and at the mouth of the River Saint Peter, on the bank of which were the Mantantans, and farther up into the interior to the North east of the Mississippi as far as the Menchokatonx with whom dwell the majority of the Songeskitons and other Nadouessioux, who are to the North east of the Mississippi, to take possession for, and in the name of the King, of the countries and rivers inhabited by the said Tribes and of which they are proprietors. The present Act done in our presence, Signed with our hand, and subscribed by the Reverend Father Marest, Messieurs de Borie-guillot and Caumont, and the Sieurs Le Sueur, Hebert, Lemire and Blein.

Done at the Post St. Anthony, the day and year aforesaid. These presents are in duplicate; Signed to the Original—Joseph Jean Marest of the Society of Jesus; N. Perot, Legardeur de Caumont, Le Sueur; Jean Hebert, Joseph Lemire and F. Blein.

Previous proclamations of St. Lusson in 1671 at the outlet of Lake Superior, of Du Luth in 1679 at the west end of this lake and at Mille Lacs, and of La Salle in 1682 at the mouth of the Mississippi, had in general terms asserted the soveriegnty of France over the basins of the upper Great Lakes and the Mississippi.

Within the decade following the ceremonious declarations by DuLuth, which were not preserved in writing, considerable exploration of the southeastern part of Minnesota had been made by Perrot or by Le Sueur and others under his supervision. His proclamation mentions the rivers St. Croix and St. Peter as already well known by these names. The latter is the Minnesota river, to which long afterwards this euphonious Sioux

name was restored in the usage of the white men, when it was chosen as the name of our territory and state.

There is no record of Perrot's calling together the Indian chiefs of this region on the occasion of the declaration at Fort St. Antoine, nor of their assent to its claim of French dominion. It was an official act, probably indeed announced and explained to some of the chiefs of the Sioux and other tribes mentioned, but performed mainly because it had been required by the Governor of New France to form a part of his reports to the King.

BIOGRAPHIC SKETCH OF LE SUEUR.

Pierre Charles Le Sueur was born in 1657, of parents who had emigrated to Canada from the ancient province of Artois in northern France. He came to the Mississippi by way of the Wisconsin river, probably with Perrot, in 1683, his age being then twenty-six years. The remaining years of the century, excepting expeditions for the sale of furs in Montreal and absence in voyages to France, he spent principally in the country of the Sioux or Dakotas, on the upper Mississippi and on the Minnesota river.

He was at Fort St. Antoine, on the eastern shore of Lake Pepin, with Perrot at the time of his proclamation in 1689, which he signed as a witness. At some time within a few years preceding or following that date he made a canoe trip far up the Mississippi, this being the first recorded exploration of its course through the central part of our state.

In 1693, Le Sueur was stationed, by order of Count Frontenac, the governor of Canada, at Chequamegon bay, on the southwest side of Lake Superior, for maintaining peace between the Ojibways and the Sioux, his influence with the latter being great.

Two years afterward, in the spring of 1695, he established a trading post on Isle Pelée, now Prairie island, where Groseilliers and Radisson visited and lived with the Hurons forty years before. This post, or fort, as it was called, was built likewise

at the command of Frontenac, for the same purpose of preventing the Ojibways on the northeast, in the Lake Superior region, and the Sioux or Dakotas of the upper Mississippi, from continuing or renewing their hereditary warfare. Early in the summer of this year, Le Sueur traveled to Montreal, accompanied by a chief of the Ojibways, named Chingouabé and a chief of the Dakotas, named Tioscaté, the latter being the first of that people to visit Canada.

On the 18th of July, 1695, at Montreal, Frontenac granted an audience to these chiefs, in the presence of several of his officers. The Ojibway spoke first, in thanks for the advantages received by his people through the French fur trade, and requesting that Le Sueur, because of his knowledge of both the Ojibway and Dakota languages, should return to their country. The Dakota chief laid down the skins of a beaver and an otter, and, weeping, implored that the governor would give friendship and protection, by selling to his people iron weapons like those already obtained by other tribes. He laid twenty-two arrows on the beaver skin, naming as many villages of his people, in the present area of Minnesota, who thus desired to trade with the French.

It was Le Sueur's promise and intention to return the next spring to Minnesota, but the death of this Dakota chief at Montreal in the winter, after a sickness of a month, changed his plan. He had discovered mineral wealth, as he thought, in the blue and green earth which the Dakotas dug from the rock bluff of the Blue Earth river a few miles from its junction with the Minnesota river, near the site of Mankato. The Dakota people used this earth as a paint, but Le Sueur thought it to be an ore of copper. He sailed to France, submitted the supposed ore to L'Huillier, one of the king's assayers, and secured the royal commission to work the mines. But disasters and obstacles deterred him from this project until four years later, when, having come from a third visit in France, with thirty miners, to Biloxi, near the mouth of the Mississippi, he ascended this river in the year 1700, using a sailing and rowing vessel and two canoes. Coming forward along the Minnesota river, he reached the mouth of the Blue Earth on the last day in September or the first in October.

He spent the ensuing winter on the Blue Earth river, having built a camp or post named Fort L'Huillier, and in the spring mined a large quantity of the supposed copper ore. Taking a selected portion of the ore, amounting to two tons, and leaving a garrison at the fort, Le Sueur again navigated nearly the whole length of the Mississippi, and arrived at the Gulf of Mexico in February, 1702. Thence, with Iberville, the founder and first governor of Louisiana, who was a cousin of Le Sueur's wife, he sailed for France in the later part of April, carrying the ore or green earth, of which, however, nothing more is known.

Records in Canada preserve the date of LeSueur's marriage, at Boucherville, March 29, 1690, to Marguerite Messier, whose mother, as Dr. Neill, the historian of Minnesota, ascertained, was a sister of Iberville's father. Le Sueur had four children, three daughters and a son. A letter of Cadillac, written in 1712, cited in the Margry Papers, states that after the appointment of Iberville to Louisiana, Le Sueur had his family remove there, and that they were then living in Louisiana, where Le Sueur had died of sickness. Another account indicates that he died during his return voyage from France.

It was probably his son, Jean Paul Le Sueur, born in Canada, June 1, 1697, who was active in the Natchez war, in 1730 and 1731. Charlevoix, as translated by Shea, said of this Le Sueur that he "had come when quite young from his native Canada to Louisiana, and had grown up among these tribes [Choctaws, Natchez, and others]. * * * With great toil he visited all the villages [of the Choctaws]; he was well received everywhere, and had no great difficulty in forming the corps of seven hundred warriors * * * whom he led straight against the Natchez." Shea and others have not clearly distinguished this Le Sueur from the explorer of Minnesota; but, as before stated, Pierre Charles Le Sueur is said by different authors to have died before 1712, and the work done in the Natchez war, as here noted and attributed to Jean Paul Le Sueur, seems impossible to anyone at an age of more than seventy years.

Within the first few years after Le Sueur came to the upper Mississippi and to the area of this state, he had acquired ac-

quaintance with the language of the Sioux, and had almost certainly traveled with them along the Minnesota river. From his first Christian name, Pierre, as Neill and Winsor think, with whom I fully coincide, came the French name St. Pierre, in English the St. Peter, by which this river was known to the white people through more than a century and a half, until its aboriginal Sioux name was adopted for the new Territory of Minnesota.

We possess little of Le Sueur's own writing, but good accounts of his life and work have come down in the narrations of others. He was a man to be relied on for successful leadership in great and difficult enterprises, not inclined to boast, and a strict adherent to truthfulness. During the hundred years of French occupation of what is now Minnesota, Le Sueur surpassed any other man, excepting perhaps Perrot, in the extension of geographic knowledge of its area, in his acquaintance with the Dakota people and influence in their councils, and in the establishment of the fur trade and other commercial development of this region.

NARRATIONS OF LE SUEUR AND PENICAUT.

An account of the expedition by Le Sueur in the year 1700 for mining on the Blue Earth river is preserved in the "Historical Journal of the Settlement of the French in Louisiana," by Bénard de la Harpe, published in the French language at New Orleans in 1831. This narration is called Le Sueur's journal, though he is constantly mentioned as if it was written by some other person. A translation of it in English was published in 1861 by John Gilmary Shea in "Early Voyages up and down the Mississippi" (pages 89-111), from which considerable quotations are made in a later part of this chapter.

The same narration, in its original French, is also published in the Margry Papers (Volume VI, 1886, pages 69-87).

Another account of this expedition was given in an extensive manuscript written by Penicaut, a ship carpenter, who accompanied Le Sueur, and who later spent about twenty years

among the Indian tribes of the lower Mississippi. From this manuscript, purchased in 1869 by the Library of Congress, the part narrating the mining expedition was translated by Alfred J. Hill and was published in 1870, with an introductory note by Rev. Edward D. Neill, as the first paper in the third volume of the Minnesota Historical Society Collections (pages 1-12). Quotations from this translation are given farther on.

Volume V of the Margry Papers, published in 1883, contains, in its pages 373-586, the entire French text of the Relation of Penicaut.

VOYAGE ABOVE THE FALLS OF ST. ANTHONY.

In refutation of a fictitious narrative by Mathieu Sagean, which is published in the Margry Papers (Volume VI, pages 95-162), Le Sueur told of a canoe voyage made by himself about the year 1690 or earlier, ascending the Mississippi more than a hundred leagues above the Falls of St. Anthony. His testimony against the falsehoods of Sagean is given in pages 171-172 of the same volume. Alfred J. Hill translates what Le Sueur learned of the part of this river beyond the limit of his journey as follows: "The Sioux with whom I went up assured me that there were yet more than ten days journey to ascend. It is at least 100 leagues before coming to the sources of the Mississipi. I say sources, because there are many of them according to the report of the savages."

Brower and Hill, commenting on this statement, concluded that Le Sueur voyaged up the Mississippi to the outlet of Sandy lake, where a village of the Sioux doubtless then existed, as it has also been during the last century or longer the site of an Ojibway village. The estimates noted, that the distance traveled above the Falls of St. Anthony was about a hundred French leagues, and that an equal distance of the river's course still separated the voyageurs from its sources, agree very closely with the accurate measurements now made by exact surveys, if Le Sueur's journey ended at Sandy lake.

Very probably Charleville, whose narration of a similar early expedition of a hundred leagues on the part of the Mississippi

above these falls is preserved by Du Pratz in his "History of Louisiana," was a companion of Le Sueur, so that the two accounts relate to the same canoe trip. Charleville said that he was accompanied by two Canadian Frenchmen and two Indians; and it is remarkable that Charleville, like Le Sueur, was a relative of the brothers Iberville and Bienville, who afterward were governors of Louisiana. As in Le Sueur's description of the sources of the great river, the Sioux to whom Charleville came at the end of his journey told him that these sources consisted of many smaller rivers.

TRADING POST ON PRAIRIE ISLAND.

The first locality in Minnesota inhabited by white men, Prairie island, also called by former writers Bald island, in translation of its old French name, Isle Pelée, became the site of an important early trading post. Forty years after Groseilliers and Radisson came there, Le Sueur established a fort, that is, a trading post, on this island, in 1695, of which La Harpe, in the introduction of his narrative of Le Sueur's mining expedition in 1700, wrote as follows, according to Shea's translation (page 90):

* * * What gave rise to this enterprise as far back as the year 1695, was this. Mr. Le Sueur by order of the Count de Frontenac, Governor General of Canada, built a fort on an island in the Mississippi, more than 200 leagues above the Illinois, in order to effect a peace between the Sauteurs nations [Ojibways], who dwell on the shores of a lake of five hundred leagues circumference [Lake Superior], one hundred leagues east of the river, and the Scioux, posted on the Upper Mississippi. The same year, according to his orders, he went down to Montreal in Canada with a Sauteur chief named Chingouabe and a Sciou named Cioscate [Tioscate, page 107], who was the first of his nation who had seen Canada. * * *

Penicaut wrote of Prairie island, as translated by Hill:

At the end of the lake [Pepin] you come to Bald Island, so called because there are no trees on it. It is on this island that the French from Canada established their fort and storehouse when they come to trade for furs and other merchandise, and they also winter here because game is very abundant in the prairies on both shores of the

river. In the mouth of September they bring their store of meat there procured by hunting, and after having skinned and cleaned it, place it upon a sort of raised scaffold near the cabin, in order that the extreme cold which lasts from the month of September to the end of March, may hinder it from corrupting during the winter, which is very severe in that country. During the whole winter they do not go out except for water, when they have to break the ice every day, and the cabin is generally built on the bank, so as not to have to go far. When spring arrives the savages come to the island, bringing their merchandise, which consists of all kinds of furs, as beaver, otter, marten, lynx, and many others—the bear skins are generally used to cover the canoes of the savages and Canadians. There are often savages who pillage the French Canadian traders, among others the savages of a village composed of the five different nations, and which have each their own name, that is, the Sioux, the people of the big village, the Mententons, the Mencouacantons, the Ouyatespony, and other Sioux of the plains.

Three leagues higher up, after leaving this island, you meet on the right the river St. Croix. * * *

In a careful examination of this large island, during the spring of 1902, the late Hon. J. V. Brower, while mapping its many aboriginal mounds, found only very scanty indications, in a single place, about a half mile south from Sturgeon lake, on the high bank west of its outlet, of any ancient dwelling or inclosure, constructed by Europeans, such as Le Sueur's fort. It probably was merely a rude log cabin, inclosed by a palisade, both soon decaying and leaving scarcely any traces recognizable after two centuries. Yet its thus leaving almost no sign seems not inconsistent with the statements of Penicaut, which imply that during several years, before and after Le Sueur's commission in 1695, Prairie island was an important station of French traders.

From Charlevoix, in the third volume of his History of New France, published in 1744, I translate the following brief description of this island:

On going above the lake [Pepin], one comes to Isle Pelee, so named because it has not a single tree, but is a very beautiful prairie. The French of Canada have often made it the center of their trade in these western districts, and many have also wintered there, because all this country is excellent for hunting.

Apparently this note was simply condensed from Penicaut, and I cannot refer to any evidence of the occupation of the island by white traders after the year 1700. It has perhaps been continuously occupied by the Sioux since that date; for numerous families of these people still live there, on land which they cultivate, allotted to them by the United States government, about a mile west of the supposed site of Le Sueur's post. All the other very extensive cultivatable land of the island is owned by white immigrants.

LE SUEUR'S MINING EXPEDITION.

The narration of the expedition of Le Sueur in the year 1700 for mining on the Blue Earth river, published by La Harpe and translated by Shea, tells of the ascent of the Mississippi and Minnesota rivers, the establishment of Fort L'Huillier on the Blue Earth a few miles above its mouth, the first mining of the blue and green earth supposed to be an ore of copper, and dealings with the surrounding Sioux, Iowas, and other Indian tribes, until the 13th of December. Penicaut's narration omits many details, but gives a concise account of the entire expedition, including the return of Le Sueur to the Gulf of Mexico and also the return of the garrison left by him at his fort.

From the French colonial settlement at Biloxi, Le Sueur doubtless came into the Mississippi by the way of lakes Borgne, Pontchartrain, and Maurepas, the Amite river, and the Bayou-Manchac, entering the great river more than two hundred miles above its mouths. During the summer and early autumn of 1700 he voyaged up the Mississippi, reaching the mouth of the Missouri on July 13th, and that of the Wisconsin river on the first day of September.

The following quotation from Shea's translation gives a history of about three months, comprising the last part of Le Sueur's voyage, the construction of the winter camp or fort, the beginning of mining, and the efforts of Le Sueur to dissuade the Indians from intertribal warfare and to secure their friendship and alliance with the French in fur trading.

On the 16th [of September] he left on the east of the Mississippi a great river called St. Croix, because a Frenchman of that name was wrecked at its mouth. * * *

From the 16th to the 19th he advanced thirteen leagues and three quarters. After having made from the Tamarois [six leagues below the mouth of the Missouri] two hundred and seven leagues and a half, he left the navigation of the Mississippi at this point to enter St. Peter's River [the Minnesota], on the west of the Mississippi, on which he made till the 1st of October forty-four leagues and a quarter. After which he entered Blue River [the Blue Earth], so called by reason of the mines of blue earth found at its mouth. He made his settlement at 44 deg. 13 m. N.

At this spot he met nine Scioux, who told him that this river was the country of the Scioux of the West, of the Ayavois [Iowas] and the Otoctatas [Otoes] a little further; that it was not their custom to hunt on the grounds of others without being invited by those to whom they belonged; that when they should wish to come to the fort to get supplies, they would be exposed to be cut off by their enemies coming up or going these rivers, which are narrow; and that if he wished to take pity on them, he must settle on the Mississippi in the neighborhood of the mouth of St. Peter's river, where the Ayavois, the Otoctatas, and the Scioux could come as well as they. Having made this speech, they began, according to their custom, to weep over Mr. Le Sueur's head, saying, Oueachissou ouaepanimanabo; which means, Take pity on us.

Mr. Le Sueur had foreseen that his establishment on the Blue river would not be relished by the Scioux of the East, who are, so to speak, the masters of the other Scioux and of the nations just named, because they are first with whom we traded, which has given them a good supply of guns. As he had not undertaken the enterprise in the sole view of the beaver trade, but to learn thoroughly the quality of the different mines which he had formerly discovered, he told them that he was sorry he had not known their ideas sooner; that it was clearly just, as he had come expressly for them, for him to settle on their land; but the season was too far spent to retrace his steps. He then made them a present of powder, balls, knives, and a fathom of tobacco, to invite to come as soon as possible to the fort that he was going to erect; that there, when they were all assembled, he would tell them the intentions of the king, their master and his.

The Scioux of the West have, according to the reports of those of the East, more than a thousand cabins. They do not use canoes, cultivate the earth, or gather wild oats [wild rice]; they generally keep to the prairies between the Upper Mississippi and the River of the Missouris, and live solely by hunting. * * *

On the 3d of the same month [October] he received at the fort several Scioux, among whom was Ouacantapai, chief of the village. Soon after two Canadians who had gone hunting arrived; they had been robbed by the Scioux of the East, who had taken away their guns in revenge for Mr. Le Sueur's settling on Blue river. On the 14th the fort was finished; the name of Fort L'huiller was conferred upon it.

On the 22d two Canadians were sent out to invite the Ayavois and the Otoctatas to come and make a village near the fort, because these Indians are laborious and accustomed to cultivate the ground, and he hoped to obtain provisions from them and make them work the mines. * * *

* * * On the 26th Mr. Le Sueur proceeded to the mine, with three canoes which he loaded with blue and green earth. It is drawn from mountains [the river bluffs] near which are the very abundant copper mines, of which Mr. L'Huillier, one of the king's farmers general, made an assay at Paris, in 1696. * * *

On the 9th of November eight Mantantons Scioux presented themselves at the fort, having been sent by the chiefs of their village to say that the Mendeouacantons were still at their lake [Mille Lacs] on the lands east of the Mississipi, and that they could not come for a long time. * * *

On the 26th the Mantantons and Oujalespoitons arrived at the fort. After pitching their cabin in the wood, Ouacantapai came to beg Mr. Le Sueur to come to him. He there found sixteen men with several women and children, who had their faces daubed with black. In the middle of this cabin were several buffalo skins that served as a carpet. They made signs to him to sit down, and at the same time all these persons began to weep for half a quarter of an hour; then the chief offered him wild rice to eat, and according to their custom put the first three spoonfuls in his mouth, after which he told him that all those whom he saw present were like himself the relatives of Tioscate (this was the name of the Sciou whom Mr. Le Sueur took to Canada in 1695, and who died there in 1696). * * *

The next day he assembled in the fort the most eminent of both villages, and as it is impossible to reduce the Scioux to prevent their going to war, except by inducing them to cultivate the ground, he told them that if they wished to render themselves worthy of the king's protection, they must abandon their errant life and come and form a village around his settlement, where they would be sheltered from the attacks of their enemies; that to facilitate the means of leading a happy life there, and save them from the pangs of hunger, he would give them all the corn necessary to plant a good deal of ground; that the king, their chief and his, when sending him had forbidden him to trade in beaver skins, knowing that this hunt obliged them to scatter,

and exposed them to be killed by their enemies; that in consequence he had come to settle on Blue river, the neighborhood of which, as they had several times assured him, was full of all kinds of beasts, for the skins of which they would supply all their wants; that they should reflect that they could not do without the goods of the French, and that the only means not to be deprived of them was not to make war on nations allied to us; and as it is the Indian custom to accompany their words with a present proportioned to the affair treated of, he gave them fifty pounds of powder and as many of balls, six guns, ten hatchets, twelve fathoms of tobacco, and a steel calumet.

On the 1st of December the Mantantons invited Mr. Le Sueur to a great banquet; four of their cabins had been thrown into one, in which there were a hundred men seated around, each with his platter before him. After the repast Ouacantapai, their chief, made them all smoke successively the steel calumet which had been presented to them; then he made a present to Mr. Le Sueur of a slave and a sack of wild rice, and pointing to his people said: "Behold the remnants of that great village which thou didst formerly behold so numerous; all the others have been slain in war, and the few men that thou seest in this cabin accept the present that thou makest them, and are resolved to obey that great chief of all the nations, of whom thou hast spoken to us; thou must therefore no longer regard us as Scioux, but as Frenchmen, and instead of saying that the Scioux are wretches who have no sense, and fit only to plunder and rob the French, thou wilt say: My brothers are unhappy men who have no sense; we must try and get them some; they rob us, but to prevent them I will take care that they do not lack iron, that is to say all kinds of goods. If thou dost this, I assure thee that in a short time the Mantantons will become French, and will no longer have the vices with which thou reproachest them." Having finished this harangue, he covered his head with his robe, the others imitated him; they wept for their comrades slain in war, and chanted a farewell to their country in so mournful a tone that one could scarcely help sharing their grief. Then Ouacantapai made them smoke again, and distributed among them the presents that had been given to them, and said that he was going to the Mendeouacantons to inform them of the resolution and to invite them to do the same.

On the 12th three Mendeouacanton chiefs and a number of Indians of the same village arrived at the fort, and the next day made a kind of satisfaction for the plunder they had committed on the French. They brought 400 pounds of beaver skins, and promised that next summer, after building canoes and gathering in their harvest of wild rice, they would come to settle near the French. The same day they returned to their village east of the Mississipi.

Le Sueur's narration ends thus abruptly, excepting an appended list of seven tribes of the eastern Sioux and nine tribes of the western Sioux, with the meanings of their names. It was evidently derived partly from memoranda or a journal kept by Le Sueur during the expedition, and probably also from his telling it according to his memory, being written out by some other person, perhaps more accustomed to literary expression. This appears to have been done in the early part of 1702, soon after Le Sueur's return to Biloxi or Mobile and before his sailing to France. Such record of his expedition would be required by Bienville, then governor of this new province of Louisiana, for preservation in the colonial archives.

The continuation of the record, which probably included a similar report of all the time spent by Le Sueur in Minnesota during this expedition and of his return, had perhaps been lost, as it appears not to have been seen by La Harpe, who was in Louisiana from 1718 to 1723. Later he wrote in France the Historical Journal, containing this part of the report of Le Sueur's expedition. La Harpe's work was published in 1831, as before noted, after remaining in manuscript about a hundred years.

In the Relation of Penicaut we have his very interesting history of this expedition, which in some unimportant particulars shows discrepancies with the narration of Le Sueur, although the two accounts have in general a close agreement. As translated by Hill, Penicaut wrote:

* * * I was ordered by M. de Sauvolle [the governor of Louisiana, 1699-1701] to go on this expedition which M. le Sueur was going to make, because of my being a carpenter by trade, in the service of His Majesty, and necessary to make and repair shallops. * * * After he had got together all the necessary provisions and tools and had taken leave of M. de Sauvolle, he set out in the month of April of this year [1700] with a single shallop, in which we were but twenty-five persons. * * *

* * * Above the mouth of the Wisconsin, and ten leagues higher up on the same side, begins a great prairie extending for sixty leagues along the bank of the Mississippi on the right—this prairie is called Winged Prairie. The further ends of these prairies reach to the mountains [bluffs of the Mississippi valley], making a very fine prospect. Opposite to the Winged Prairie on the left there is another

prairie facing it called Paquitanet, which is not so long by a great deal. Twenty leagues above these prairies is found lake Good Help [Lake Pepin], which is seven leagues long and one across, and through which the Mississippi passes. To the right and left of its shores there are also prairies. In that on the right, on the bank of the lake, there is a fort [St. Antoine] which was built by Nicholas Perrot, whose name it yet bears. [The description of Prairie island follows, as quoted on a previous page of this chapter.]

* * * Ten leagues further [in the voyage up the Mississippi from the mouth of the St. Croix river] you come to the Falls of St. Anthony, which can be heard two leagues off. It is the entire Mississippi falling suddenly from a height of sixty feet, making a noise like that of thunder rolling in the air. Here one has to carry the canoes and shallops, and raise them by hand to the upper level in order to continue the route by the river. This we did not do, but having for some time looked at this fall of the whole Mississippi, we returned two leagues below the Falls of St. Anthony to a river coming in on the left of the Mississippi, which is called the river St. Peter. We took our route by its mouth and ascended it forty leagues, where we found another river on the left [Blue Earth river] falling into the St. Peter, which we entered. We called this Green River, because it is of that color by reason of a green earth, which, loosening itself from the copper mines, becomes dissolved in it and makes it green. A league up this river we found a point of land a quarter of a league distant from the woods, and it was upon this point that M. le Sueur resolved to built his fort, because he could not go any higher on account of the ice, it being the last day of September, when winter, which is very severe in that country, has already begun. Half of our people went hunting, whilst the others worked on the fort. We killed four hundred buffaloes, which were our provisions for the winter, and which we placed upon scaffolds in our fort, after having skinned and cleaned and then quartered them. We also made cabins in the fort, and a magazine to keep our goods. After having drawn up our shallop within the inclosure of the fort, we spent the winter in our cabins.

When we were working on our fort, in the beginning, seven French traders of Canada took refuge there. They had been pillaged and stripped naked by the Sioux, a wandering nation living only by hunting and rapine. Amongst these seven persons there was a Canadian gentleman of M. le Sueur's acquaintance, whom he recognized at once and gave him some clothes, as he did also to all the rest, and whatever else was necessary for them. They remained with us during the entire winter at our fort, where we had not food enough for all, except the flesh of our buffaloes, which we had not even salt to eat with. We had a good deal of trouble the first two weeks in getting used to it, having diarrhoea and fever, and being so tired of it that we hated the

very smell. But little by little our bodies got adapted to it, so well that at the end of six weeks there was not one of us that could not eat six pounds of meat a day and drink four bowls of the broth. As soon as we were accustomed to this kind of living it made us very fat, and there was then no more of sickness amongst us.

When spring arrived we went to work on the copper mine. This was in the beginning of April of this year [1701]. We took with us twelve laborers and four hunters. This mine was situated about three quarters of a league from our post. We took from the mine in twenty-two days more than thirty thousand pounds weight of ore, of which we only selected four thousand pounds of the finest, which M. le Sueur, who was a very good judge of it, had carried to the fort, and which has since been sent to France, though I have not learned the result.

This mine is situated at the beginning of a very long mountain [the valley bluff] which is upon the bank of the river, so that boats can go right to the mouth of the mine itself. At this place is the green earth, which is a foot and a half in thickness, and above it is a layer of earth as firm and hard as stone, and black and burnt like coal by the exhalation from the mine. The copper is scratched out with a knife. There are no trees upon this mountain. If this mine is good it will make a great trade, because the mountain contains more than ten leagues running of the same ground. It appears, according to our observations, that in the very finest weather there is continually a fog upon this mountain.

After twenty-two days' work we returned to our fort, where the Sioux, who belong to the nation of savages who pillaged the Canadians that came there, brought us merchandises of furs. They had more than four hundred beaver robes, each robe being made of nine skins sewed together. M. le Sueur purchased these and many other skins which he bargained for in the week he traded with the savages. He made them all come and camp near the fort, which they consented to very unwillingly; for this nation, which is very numerous, is always wandering, living only by hunting, and when they have stayed a few days in one place they have to go off more than ten leagues from it for game for their support. * * *

* * * We sell in return wares which come very dear to the buyers, especially tobacco from Brazil in the proportion of a hundred crowns the pound; two little horn-handled knives or four leaden bullets are equal to ten crowns in exchange for their merchandises of skins, and so with the rest.

In the beginning of May we launched our shallop in the water and loaded it with this green earth that had been taken out of the mines and with the furs we had traded for, of which we brought away three canoes full. M. le Sueur, before going, held council with M. d'Eraque, the Canadian gentleman, and the three great chiefs of the Sioux, three

brothers, and told them that as he had to return to the sea he desired them to live in peace with M. d'Eraque, whom he left in command of Fort L'Huillier, with twelve Frenchmen. M. le Sueur made a considerable present to the three brothers, chiefs of the savages, desiring them never to abandon the French. After this we, the twelve men whom he had chosen to go down to the sea with him, embarked. In setting out M. le Sueur promised to M. d'Eraque and the twelve Frenchmen who remained with him to guard the fort, to send up munitions of war from the Illinois country as soon as he should arrive there; which he did, for on getting there he sent off to him a canoe loaded with two thousand pounds of lead and powder, with three of our people in charge of it. * * *

In this same time [the spring of 1702] M. d'Iberville had sent a boat, laden with munitions of war and provisions, to M. de St. Denis, commanding the fort on the bank of the Mississippi [about thirty miles below the site of New Orleans]. They found there M. d'Eraque, who had arrived with the twelve Frenchmen who remained with him at fort L'Huillier. He came shortly after in the same boat to Mobile, where M. d'Iberville was, whom he saluted, and reported to him that M. le Sueur, having left him at the fort L'Huillier, had promised him, in parting, to send him from the Illinois country ammunition and provisions, and that having looked for them a long time without hearing any news of them, he had been attacked by the nations of the Maskoutins and Foxes, who had killed three of our Frenchmen whilst they were working in the woods but two gun shots beyond the fort; that when the savages had retreated he had been obliged, after having concealed the merchandises he had remaining, and seeing that he was out of powder and lead, to abandon the fort and descend with his people to the sea; that at the Wisconsin he had met M. Juchereau, criminal judge of Montreal, in Canada, with thirty-five men, whom he had brought with him to establish a tannery at the Wabash; that he had descended with him to the Illinois where he had found the canoe M. de Bienville sent him; that he had arrived in this canoe at the post of M. de St. Denis the night before the boat arrived there; and that, having learned from M. de St. Denis of the arrival of M. d'Iberville, he had taken advantage of that opportunity to pay his respects to him and offer him at the same time his services.

SITES OF FORT L'HUILLIER AND LE SUEUR'S MINE.

According with the Relation of Penicaut, who noted that the distance of Fort L'Huillier from the mouth of the Blue Earth river was one league,. its site has been identified by Mr.

Thomas Hughes, of Mankato, as a natural mound or plateau which rises steeply from the southeastern bank of the Blue Earth at the mouth of the Le Sueur river. In a paper read before the Minnesota Historical Society on November 14, 1904, Mr. Hughes gives the following description of this spot and of the site of the mine, which is nearly two miles (called by Penicaut about three quarters of a league) farther up the Blue Earth river, in its southeastern bluff.

As the fort consisted of three or four log cabins inclosed by a log palisade, the timber used in its construction must have been conveniently obtained, since Le Sueur's party had no means to transport it except by hand. It is also evident that in selecting a site for a fort it would be natural to fix upon the strongest and most commanding position in the vicinity where good water and building material were handy.

Right at the confluence of the Le Sueur and Blue Earth rivers stands a large natural mound, about sixty to seventy-five feet high, with a few acres of fairly level land on its top. It is on the right or east bank of the Blue Earth river, and just below the mouth of the Le Sueur. * * *

The top of the mound is now a cultivated field; but originally it had a grove of two or three acres of heavy timber upon it. The highest point is immediately opposite the junction of the two rivers, where this grove once stood. It is a most commanding spot and affords a magnificent view of the Blue Earth and Le Sueur valleys.

Some of the early settlers remember noticing, before the land was grubbed and cultivated, indications of an old excavation just at this point. The place by actual measurement is distant from the mouth of the Blue Earth river about a French league, or somewhat less than three miles; and the bed of blue or green clay, which the Indians used for pigment, and which Le Sueur supposed to contain copper, is found three quarters of a league farther up the Blue Earth, and nowhere else.

On the very top of the mound, and within a few feet of where the fort must have stood, a fine large spring of running water gushes forth, which in pioneer days never failed in summer or winter.

In fact, the top of this mound tallies exactly with all the data we possess regarding the fort's location, while no other spot tallies with any of them.

Evidence of an Indian battle, or more probably an attack from an ambuscade, was found in June, 1907, in excavating for gravel about a mile and three quarters southwest from the site of Fort L'Huillier, where seventeen headless skeletons were

exhumed from separate graves close together. The bodies had been laid at full length on their backs, in the manner of burial by white men, quite unlike the customs of the Indian tribes of this region. The most probable explanation of this discovery is given by Mr. Hughes, who thinks these to be skeletons of Sioux killed in the year 1701 by a war party of the Maskoutin and Fox Indians, whom Penicaut mentions as attacking the Frenchmen left by Le Sueur at Fort L'Huillier. The heads of the slain having been carried away as trophies of war, the bodies are thought to have been interred by the French, who were friends of the Sioux, and who soon after this attack abandoned the fort and descended the Minnesota and Mississippi rivers.

Chapter IX.

VERENDRYE AND HIS SONS.

MAPS BY HENNEPIN, FRANQUELIN, AND DELISLE.

THE earliest published map drafted under the direction of an explorer of Minnesota is in Hennepin's "Description of Louisiana," issued at Paris in 1683, which now is an exceedingly rare book. On this map, reproduced by Shea in his translation of Hennepin's work, and by Prof. N. H. Winchell in Volume I of the Final Report on the Geological and Natural History Survey of Minnesota, we recognize the Mississippi from its source in northern Minnesota to a point below the mouth of the Illinois river, while farther south to the Gulf of Mexico it is dotted. Both these streams bear their ancient French names, which soon passed out of use. The St. Croix river, Rum river, and Crow river, are also delineated; or perhaps the last is intended for the Minnesota river, although on the map it joins the Mississippi above the Falls of St. Anthony. Lake Pepin is shown, and has its earliest French name, meaning, in English, the Lake of Tears. Mille Lacs appears as Lac Buade, for the family name of Count Frontenac. This map is on a very small scale, as it includes all that was known of North America, from the Pacific ocean (called the South sea) to the Atlantic (called the Sea of Canada); and the map, with its ornately engraved title, even extends east to the shores of Europe and Africa.

Five years later, in 1688, the Canadian French geographer, Franquelin, making use of information from Joliet and Marquette, La Salle, Hennepin, Du Luth, and others, drafted for

Louis XIV a more detailed map of North America. The part of this map which comprises lakes Michigan and Superior, lake Nipigon, lakes Winnipeg and Manitoba (called respectively the lakes of the Crees and Assiniboines, with their ancient spelling), Lac de Buade (Mille Lacs), and the upper Mississippi region, was published by Dr. Neill in his History of Minnesota (fourth edition, 1882) and by Professor Winchell in the volume before cited. The upper Great Lakes of the St. Lawrence are well outlined, with their tributary streams. The Mississippi, Illinois, Ohio, Missouri, and Des Moines rivers, take their present names, but, as might be expected, with ancient spelling which has been since somewhat changed. No trading post or mission is shown within the area of Minnesota; although Hennepin had falsely marked Recollect missions on his map, as founded northwest of Mille Lacs. The rivers and lakes on the northern boundary of Minnesota, west of Lake Superior, were unknown.

William Delisle, the royal geographer of France, in 1703, published a map of Louisiana, reaching north to Minnesota, and a map of Canada or New France, which extended to many small lakes and streams called "Sources of the Mississippi according to the report of the savages." Le Sueur had given his aid in the preparation of both these maps. Copies of the parts of each in which we are especially interested are given in Neill's History of Minnesota. For the first time the river from which our state takes its name is somewhat accurately drawn, and is called the River St. Peter or Minnesota, with Le Sueur's fancied mines of copper and of coal near it. The geographic "report of the savages" refers to what the Dakotas at or near Sandy lake had told to both Le Sueur and Charleville, who probably, as before noted, were companions in a canoe trip far up the Mississippi, of which they gave to history, quite independently, almost parallel accounts.

SKETCH MAP DRAWN FOR VERENDRYE BY OCHAGACH.

The next considerable increase of cartography of the area that became Minnesota is, according to its French title, when

SECTION OF CHART BY WILLIAM DE L'ISLE.

anglicized, a "map drawn by the savage, Ochagach, and others, which has led to the discoveries of the French officers represented in the adjoining map, that is, the one drafted by Buache in 1754, showing the country westward from the Great Lakes, with the sketch by Ochagach inserted at its margin. Bellin, the learned French geographer, in 1755, stated that this sketch was the earliest draft in the archives of the French Department of the Colonies, showing the region west of Lake Superior with any detail.

In the year 1728, when Pierre Gautier Varennes, more commonly known by his title as the Sieur de la Verendrye, was stationed as an agent of the fur trade at Lake Nipigon, north of Lake Superior, this rudely sketched map was drawn for him by an intelligent Assiniboine Indian, named Ochagach, with aid by other Indians, tracing the canoe route of streams, lakes, and portages, from Lake Superior along the north boundary of the present state of Minnesota to the Lake of the Woods, and thence northwestward to Lake Winnipeg and the Saskatchewan river. After the insertion of some names by the French as derived from the Indians, this aboriginal delineation was shown by Verendrye to Beauharnois, the governor of Canada, and about the year 1730 it was sent to France. A tracing of it was published by Neill, in 1882, in the fourth edition of his History of Minnesota; and two years later both this sketch and the map drafted by Buache, before noted, were published by Winchell in the first volume of his Final Report as the state geologist.

The series of many small lakes on our northern boundary is conspicuous on the sketch drawn by Ochagach, and the thirteenth lake outlined, larger than any of the twelve others preceding it on the route going westward, is named Lac Sesakinaga, evidently the same as our present Lake Saganaga. Rainy lake is called Lac Tecamamisuen; but the Lake of the Woods and Lake Winnipeg, though clearly identifiable by their delineation, the former having many islands, and the latter being narrowed at the middle, are unnamed. The Saskatchewan river, of which only the lower part is shown, not extending to the junction of its south and north branches, is called Fleuve de l'Ouest (River of the West).

The sketch was most alluring to the French spirit of exploration and commercial expansion; for it seemed to promise, as also did the verbal statements of the Indians, that there was a passage to be discovered westward, for travel and trade, to the Pacific ocean.

Not far south of the Saskatchewan, this sketch map bears, in the place of the Porcupine and Pasquia hills, the name Montagnes de pierres brillantes (Mountains of shining stones), which probably suggested later the names Shining mountains and Rocky mountains, applied to our great western Cordilleran belt. As known by Ochagach, however, and described by him or others of the Indians to the French, the mountains of his sketch were doubtless the Cretaceous escarpment, generally from 500 to 1,000 feet in height of mostly steep ascent from its base to its top, south of the lower Saskatchewan and west of lakes Winnipegosis and the Red river. This escarpment is now known, in its successive parts from north to south, as the Pasquia and Porcupine hills, Duck, Riding, and Pembina mountains, and the Coteau des Prairies, which reach from the Saskatchewan valley southward into North Dakota and to the southwest part of Minnesota.

The "shining stones" were probably selenite crystals from the Cretaceous shales, the same as those which Groseilliers and Radisson had seen, or of which they had heard some description, during their visit nearly seventy years before, in 1660, among the Prairie Sioux, in whose country, as Radisson wrote, "There are mountains covered with a kind of Stone that is transparent and tender, and like to that of Venice." The Sioux or Dakota people knew of the selenite crystals in the shales, and in the comparatively thin overlying glacial drift, which together form the Coteau des Prairies; and the Assiniboines knew of the same "shining stones" of the same formations in the Pembina, Riding, and Duck mountains, and in the Porcupine and Pasquia hills.

JOURNALS OF EXPEDITIONS OF VERENDRYE AND HIS SONS.

The chief original sources of knowledge of the explorations of Verendrye and his four sons are the early French colonial

documents, of which a large number relating to their numerous exploring expeditions have been collected and published by Pierre Margry in the sixth volume of his "Discoveries and Settlements of the French in the West and in the South parts of North America, 1614-1754, Memoirs and Original Documents." In this last volume of the series, printed in French at Paris in 1886, pages 583-632 narrate the Verendrye explorations. The most interesting and longest document of this group is in pages 598-611, containing the narration of the journey in 1742-43 by two of Verendrye's sons from the Saskatchewan river southwestward to the Missouri and thence southwestward to the Rocky mountains. It is entitled "Journal of an Expedition made by the Chevalier de la Verendrye with one of his Brothers, for Discovery of a Passage to the Pacific Ocean; addressed to the Marquis de Beauharnois."

TRADING POSTS ESTABLISHED NORTHWEST OF LAKE SUPERIOR.

In 1731, Verendrye, commissioned and equipped by the Canadian government, with his sons and his nephew, Jemeraye, began their explorations far west of Lake Superior, which they left by the route of Pigeon river and the series of lakes and streams continuing westerly, as rudely mapped by Ochagach, along the present northern boundary of Minnesota. Fort St. Pierre, a trading post, was built at the mouth of Rainy lake; Fort St. Charles on the west side of the Lake of the Woods, near the 49th parallel; and other forts or trading posts on Lake Winnipeg and the Assiniboine and Saskatchewan rivers.

Verendrye had more zeal for crossing the continent and reaching the Pacific than for the wealth to be gained by the fur trade. His expeditions did not financially meet expenses, and rivals sought to displace him from the patronage of the governor and the king; but shortly before his death, in 1749, when he had expected soon to set out again on new expeditions, the king honored him by the cross of St. Louis. The name of the St. Louis river, the largest tributary of Lake Superior, probably came from this honor conferred on him.

MASSACRE AT THE LAKE OF THE WOODS.

The travels of Verendrye and his sons in and adjoining the area of Minnesota are very meagerly recorded, without definiteness of dates or of incidents, excepting one appalling event.

In the morning of the 6th of June, 1736, the eldest son of Verendrye, a Jesuit missionary, Father Aulneau, and twenty-two French voyageurs, who had started on the preceding day from Fort St. Charles to go to Mackinac for supplies, were surprised and murdered at their first camping place, on an island of the Lake of the Woods, by a war party of the Prairie Sioux. This massacre, from which not one of the Frenchmen escaped, was in revenge for aid and temporary leadership by Verendrye's son with a party of Crees when going to war against the Sioux two years before. Verendrye, who was at Fort St. Charles at the time of the massacre, was afterward urged by great numbers of the Crees, Assiniboines, and other northern tribes, to lead them in attacking the Sioux; but the wiser counsels of the bereaved father prevented the threatened disaster of a general outbreak of Indian warfare.

The contemporary and later accounts of this tragedy have been brought together and published by Lawrence J. Burpee in the Proceedings and Transactions of the Royal Society of Canada (Second Series, Volume IX, 1903, Section II, pages 15-28).

In a more recent study, Prof. N. H. Winchell concludes that the place of the massacre was probably the long sandy island adjoining the mouth of the Rainy river on its Canadian side.

DISCOVERY OF THE ROCKY MOUNTAINS.

A very satisfactory manuscript discussion of the route of the farthest western expedition of the sons of Verendrye, crossing the Plains from the Missouri river to the Rocky mountains, with platting of the courses as narrated, has been sup-

plied to the Minnesota Historical Society from a corresponding member, Captain Edward L. Berthoud, of Golden, Colorado. This manuscript was received through the kindness of another member, Mr. Olin D. Wheeler, of St. Paul, author of an important historical work in two volumes, "The Trail of Lewis and Clark."

Captain Berthoud, following the narrative in the Margry Papers, shows that quite surely the Verendrye sons came, by southwest and south-southwest marching, from the villages of the Mandans on the Missouri river to the Big Horn mountains. They first got a distant view of the mountains, as the Journal given by Margry tells us, on New Year's Day of 1743. On January 21, in a great war party of the Indians of the Plains for attacking their hereditary enemies, the Shoshone or Snake Indians, at one of their great winter encampments, the Verendryes reached the foot of the mountains, which, as the Journal says, "are for the most part well wooded, and seem very high."

If they went, in this war raid, around or alongside the north end of the Big Horn range, they may have passed beyond the Big Horn river, coming to the Shoshone camp near the stream now known as the Shoshone river, tributary to the Big Horn river from the west, so that the mountains near whose base was the camp of the Snake Indians would be the Shoshone mountains, close southeast of the Yellowstone Park. Probably their extreme advance to the Snake Indian camp, was somewhere in the foothills of the lofty and extended Big Horn range; and if they went beyond that range, I think that it was only to the Shoshone mountains.

The general route of the return was eastward to the Missouri river as narrated in the Journal, and thence northward up the west side of the Missouri, to the Mandan villages, from which the expedition had started. This part of the journey is not considered in Captain Berthoud's manuscript. Both the outward march and the route of the return are well discussed by Parkman in his work of two volumes, "A Half Century of Conflict," published in 1892. Volume II, in pages 29-58, with a sketch map of the routes going to the Rocky mountains and

returning east to the Missouri, as recorded in the Journal printed by Margry, gives a very vivid account of this whole expedition.

When the Verendryes reached the Missouri on the return, a cairn monument was erected by them on some hill or point of the bluffs overlooking that great stream, and a leaden plate, commemorating the expedition, was buried. This locality was somewhere near the present south boundary of South Dakota, about a month's travel below the Mandan villages. It would be a most interesting discovery if this plate of lead, "bearing the arms and inscription of the king," could be found. Its burial was unknown to the Indians, who were merely told that the cairn was built as a memorial of the coming of these Frenchmen to their country.

THE SEARCH FOR THE WESTERN SEA.

The printing of this volume had proceeded to the foregoing part of this chapter, when, in the summer of 1908, I learned of the work by Lawrence J. Burpee, librarian of the Carnegie Public Library of Ottawa, Canada, then published in a large book (lx and 651 pages) entitled "The Search for the Western Sea, the Story of the Exploration of North-western America." Perusal of that work leads me to add here a short summary partly derived from it, of the pioneers of westward exploration in their relation to the area of Minnesota.

First were Groseilliers and Radisson, in 1655 and 1660, whose journeys extended into this area, but not probably, as I think, to its western or northern boundaries. Du Luth and Hennepin, coming in 1679 and 1680, and Perrot and Le Sueur, in 1683 to 1700, also explored parts of Minnesota, but went no farther west or north, excepting Du Luth on the north side of Lake Superior. None of these seems to have sought for a route to the Western ocean, except again Du Luth, who wrote: "My design was to push on to the sea in a west-northwesterly direction."

The Pacific ocean, so named by Magellan in 1520, was somewhat well delineated, with the name "Sea of the South," by

Hennepin's map in 1683, for the west shores of Central America, Mexico, and California; but its northward continuation was unknown. Buache's map in 1754 conjecturally placed a very large bay of this ocean, called the "Sea of the West," at the distance of only about 300 miles west from the northern part of Lake Winnipeg, called Lac Bourbon, and some 200 miles west of the sources of the Assiniboine river.

Jacques de Noyon, a French Canadian voyageur, about the year 1688, was probably the first white man to traverse a part of our northern boundary. As narrated by an official report of the Intendant Begon, written at Quebec, November 12, 1716, published in the Margry Papers (Vol. VI, pp. 495-8), De Noyon, about twenty-eight years previous to that date, had set out from Lake Superior by the canoe route of the Kaministiquia river, under the guidance of a party of Assiniboine Indians, in the hope of coming to the Sea of the West. He passed through Rainy lake, called the Lake of the Crees, and wintered on its outflowing river, the Tekamamiouen, "otherwise called Ouchichiq by the Crees," evidently the Koochiching or Rainy river and falls, from which one of our newer counties is named.

De Noyon learned of the Lake of the Woods or of the Isles, "otherwise called the Lake of the Assiniboines," and that its outlet "flows into the Sea of the West, according to the report of the Savages," thus mistaking Lake Winnipeg to be a part of the Pacific ocean. He appears to have descended the Rainy river to the Lake of the Woods, giving descriptions of the portages at the falls and rapids of the river; he noted correctly the differing character of the country on the left and the right adjoining that lake, but he probably went no farther west or north.

In connection with their official report, De Vaudreuil, then governor of Canada, and Begon, intendant, recommended to the King that three posts should be established as means for the discovery of the Western Sea, one at the mouth of the Kaministiquia, a second on Rainy lake, and the third at the Lake of the Woods. The first of these proposed posts or forts was built in the autumn of 1717, but none seems to have existed farther west until Verendrye established his first western posts in 1731.

During the meantime a better route for canoe travel from Lake Superior to Rainy lake came into frequent use, as is indicated by a letter of an officer named Pachot, dated at Quebec, October 27, 1722 (in Margry Papers, VI, 513-517), who wrote: "The preferable route to go to the intended post will be by a little river, named Nantokouagane, which is about seven leagues from Kaministiquia." Though the distance noted is too small, the route so recommended was that of the Grand Portage and Pigeon river, which became the international boundary.

Charlevoix, commissioned in France to visit Canada and Louisiana, with the purpose of advising the home government concerning explorations for crossing the continent, traveled extensively in these great provinces or colonies, together called New France, in the year 1721. He reported that the Western Sea could probably be best reached by ascending the Missouri river and thence pushing westward. The best that could be soon undertaken, however, toward this object, was to establish a trading post and a mission among the Sioux, which was done in the autumn of 1727, by an expedition from Montreal. This post, named Fort Beauharnois in honor of the governor of Canada at that date, and the Mission of St. Michael the Archangel, occupying a log-house inside the stockade of the fort, were near the site of Villa Maria Convent at Frontenac, Minnesota, but on lower ground, beside Lake Pepin. René Boucher, the Sieur de la Perriér, was the builder and first commander of the fort; and the mission house was built by two Jesuit missionaries, Michel Guignas and Nicolas de Gonnor, being "the first Christian temple in what is now Minnesota."

In 1735 Legardeur de Saint Pierre became commander of Fort Beauharnois, which on May 13, 1737, on account of Indian hostilities, he abandoned and burned, departing down the Mississippi. It was rebuilt in 1750, and for the next two years was under the command of Pierre Paul Marin. Very interesting sketches of the history of this "last French post in the valley of the upper Mississippi," and notices of its commandants, were given by Dr. Neill in his History of Minnesota and in later pamphlets.

The cherished quest of Du Luth, to search out a way west to the sea, was taken up most earnestly by Verendrye and his sons, as already related; but the goal was not attained till half a century later, in 1792-3, when Alexander Mackenzie crossed the great western mountain belt in Canada, by the way of the Peace river, and reached the ocean. Yet later Lewis and Clark, in 1805, by the route which Charlevoix had advised, in the northern United States, traversed the mountain barriers to the Sea of the West.

EARLIEST MAPS BASED PARTLY ON THE WORK OF THE VERENDRYES.

A map very rudely sketched, probably by Verendrye or under his direction, in 1737, for the governor, Beauharnois, after remaining in manuscript nearly a hundred and fifty years, was published in 1884 by Prof. N. H. Winchell, the state geologist of Minnesota, in the first volume of his Final Report. It is the oldest map giving the present names of Red lake and Red river, Roseau lake, the Lake of the Woods, and Lake Winnipeg. Far southwest of Lake Winnipeg, a river is represented as emptying into a lake, or sea, presumably the Pacific ocean, with cities at its mouth.

Philip Buache, a French geographer, in 1754, more boldly mapped New France or Canada as stretching westward past Minnesota, Lake Winnipeg, the Assiniboine and the Saskatchewan, to the Rocky mountains, which are delineated as a narrow north to south range, but are not named, while immediately beyond is a "Sea of the West," about as large as Hudson bay or the Gulf of Mexico, like them deeply indenting the continent. From Buache's map, preserved among the state papers of France, a tracing was made for Dr. Neill, as also of Verendrye's map, with which it is published by Winchell. Buache here earliest gives the French form of the present name of Rainy lake. It had before been designated, on the maps by Ochagach and Verendrye, by an aboriginal name, which probably was translated into the French and English names. Curiously,

Red Lake and Mille Lacs, respectively the first and second in size among our ten thousand lakes lying wholly within the state of Minnesota, are represented as only a single lake on both Verendrye's and Buache's maps, having two outlets, one to the west as is true for Red Lake, and one to the south as is true for Mille Lacs.

SUGGESTION FOR A MEMORIAL NAME.

It may well be hoped that some county yet to be formed on the northern border of Minnesota will receive the name Verendrye, in historic commemoration of the explorations, hardships, and sacrifices of the patriotic and truly noble Sieur de la Verendrye and his sons. He was the founder of the fur trade in northern Minnesota, in Manitoba, and the Saskatchewan region, where it greatly flourished during the next hundred years; and two of his sons were the first white men to see the Rocky mountains, or at least some eastern range of our great Cordilleran mountain belt.

Chapter X.

JONATHAN CARVER.

FALL OF NEW FRANCE.

THE treaty of peace at Paris in 1763 took New France from the people who had explored and colonized it. France ceded Canada to Great Britain, and Louisiana, the largely unknown region west of the Mississippi, to Spain. So was fair France humiliated at the end of the Seven Years War of Europe and the French and Indian War of North America.

The motto on the state seal of Minnesota, "L'Etoile du Nord," is a tribute to the memory of the French explorers who first discovered and mapped Lake Superior, the upper part of the Mississippi, and the great region which today forms this state. The language chosen for the motto was the only language of Europeans coming here during the first century of discovery; and Minnesota may well claim its place as the North Star of our Union, by reason of its geographic position. It reaches farther north than any other state eastward, and indeed it also surpasses any state or territory westward, excepting Alaska, because Minnesota possesses a considerable tract north of the forty-ninth parallel on the west side of the Lake of the Woods, extending to the "Northwest Angle" of this lake, a point of much prominence in the treaties establishing the international boundary.

New France stretched from Acadie and Quebec west to Minnesota, and thence northwest to the Saskatchewan and south to the Gulf of Mexico. It comprised, with somewhat vague boundaries about half of this continent, which the French pioneers of commerce and of Christian missions had made known to the

world and claimed loyally as possessions of the crown of France, although their settlements and actual occupation of the country were limited, throughout the vast interior region, to widely separated trading posts and missions established on the large lakes and rivers.

The number of the French in Minnesota and indeed along all the extent of the Mississippi above New Orleans, and in all the region of the Great Lakes tributary to the St. Lawrence, was merely a handful, in comparison with the thousands of the red aboriginal people. But these people, who tipped their arrows with flaked stone and were ignorant of the art of reducing iron from its ores, became soon dependent, in a large degree, on the traffic of their furs for the firearms and other commodities of the French traders. Living with the red men and often befriending them, acquiring their language, and advising and leading them in their intertribal wars, the French gained an authority and influence far out of proportion with their numerical strength and thus became, in a sense, the owners of half of North America. Disastrous wars, however, in Europe and here wrested all this country from France, and now she owns no part of the region which her commercial enterprise and religious zeal had grasped and christened as a New France in the New World.

After the cession of Canada in the treaty of Paris, February 10,1763, many of the French voyageurs, by whom supplies had been carried to the trading posts and the valuable furs had been brought in canoe loads for shipment to Europe, transferred their service to the new English and Scotch proprietors of the fur trade; but from the date of that treaty the extension and publication of geographic knowledge of Minnesota and the Northwest were carried forward chiefly by English-speaking explorers.

BIOGRAPHIC SKETCH OF CARVER.

The first traveler and author visiting and describing Minnesota after France lost her American possessions was Jonathan Carver, who was born in 1732, in Canterbury, Connecticut. He was a lieutenant, and afterward a captain, in the French and In-

JONATHAN CARVER.

dian War during the years 1757 to 1763. When peace was declared and Canada ceded to the English, Carver "began to consider," as he says in the introduction of his book of Travels, how he "might continue still serviceable, and contribute, as much as lay in my power, to make that vast acquisition of territory, gained by Great Britain, in North America advantageous to it." He resolved to explore the most unknown parts of Canada, as he further tells us, and hoped to cross the continent to the Pacific ocean.

Starting from Boston in June, 1766, Carver traveled to the strait of Mackinaw and Green Bay, and thence, by the canoe route of the Fox, Wisconsin, and Mississippi rivers, to the area of Minnesota. Here he spent the following winter, with tribes of the Sioux. At his return east, begun in the spring of 1767, he made a treaty, as it may be called, with two of the Sioux chiefs, who formally granted to him a large tract of land on the east side of the Mississippi river, including the area of the present city of St. Paul.

On the threshhold, as it seemed, of the attainment of his hopes for discoveries in the far west, Carver was obliged to turn back. His supply of goods, to be used as presents to the Indian tribes among whom he hoped to travel to the Pacific, must be replenished. Therefore he voyaged back to Prairie du Chien, and thence, by the route of the Chippewa river and the head streams of the St. Croix, to Lake Superior and to the Grand Portage on its northwest side. But he was unable to purchase sufficient goods from the traders and voyageurs either at Prairie du Chien or the Grand Portage, and reluctantly gave up his purpose of penetrating farther west. He continued his return eastward by the way of the Great Lakes, and arrived at Boston in October, 1768, having occupied nearly two years and a half in this expedition.

Soon afterward Carver sailed to England, where he spent the remainder of his life. In accordance with his petition, he received from the government a reimbursement, of the expenses of his explorations; but he was required to supply for the colonial archives, at much personal cost and without recompense,

all his original maps and manuscripts relating to these travels, after they had been placed in the hands of a publisher.

When this work was finally issued in 1778, it brought to Carver little or no financial benefit. Two years later, overcome by sickness and by anxiety to provide for his wife and children, he died January 31, 1780, in the city of London.

PUBLICATION OF CARVER'S TRAVELS.

From copies which were made before the delivery of his papers to the government, Carver's "Travels though the Interior parts of North America," a volume of 543 pages, with two maps, was published at London in 1778, and new editions were issued the next year in London and in Dublin.

The first part of the volume is "A Journal of the Travels, with a Description of the Country, Lakes, etc." in 180 pages. The second part, entitled "Of the Origin, Customs, Religion, and Language of the Indians," has seventeen chapters, in pages 181-440, on these subjects, and two additional chapters, pages 441-526, which describe the fauna and the flora.

In an Appendix, pages 527-543, Carver directed attention to the desirability of establishing colonies in the region newly acquired by Great Britain along the east side of the Mississippi river. Eleven large tracts are described in numerical order as suitable for so many colonies in the present areas of Minnesota, Wisconsin, Illinois, Indiana, Kentucky, and Tennessee, and are delineated on the accompanying map.

After the author's death, his friend, Dr. John C. Lettsom, contributed to the third London edition, in 1781, a biographic account of Captain Carver, in 22 pages, including the first publication of the deed or grant of land obtained by Carver from the Sioux chiefs.

Several American editions of this work, with abridgment and changes, were published during the years 1784 to 1838; and transalations of it into German, French, and Dutch, were published respectively in 1780, 1784, and 1796.

WINTER OF 1766-67 WITH THE SIOUX.

In November, 1766, while Carver was making the canoe journey up the Mississippi, with a French Canadian and a Mohawk Indian as his companions, he stopped to spend a day or two with a band of Sioux somewhere between Lake Pepin and the mouth of the St. Croix. These were the first Sioux to whom he came in this journey, and he won their admiration and gratitude by his cool and intrepid conduct in meeting a large number of hostile Ojibways, who were approaching to attack the Sioux. In a long parley with several chiefs of the Ojibways, interpreted to them by the Frenchman of his party, Carver persuaded them to desist from the intended attack.

Proceeding onward, he examined the cave formerly existing in the base of the river bluff near the east edge of the present city of St. Paul. It was long known as Carver's cave, and was much visited; but in 1872 and later it was partly dug away in the construction of railways along the base of the bluff.

When Carver arrived at the mouth of the Minnesota river, the first severe cold of the coming winter had formed ice on the Mississippi that obliged him to leave the canoe; but he went forward afoot, with a young Winnebago chief, past the Falls of St. Anthony, where he arrived November 17th, to the mouth of Elk river, which he called the St. Francis. There he turned back November 21st. In his Travels he remarked: "The Mississippi has never been explored higher up than the River St. Francis, and only by Father Hennepin and myself thus far." Le Sueur and Charleville, however, as related in a preceding chapter, had voyaged much farther up the Mississippi nearly eighty years before Carver's visit. It is also probable that during this intervening time many unrecorded journeys along that part of the Mississippi had been made by French fur traders.

Returning to the Minnesota river and finding it not yet frozen, Carver ascended it with his canoe to the neighborhood of the present city of New Ulm, or farther, and wintered in that region with Sioux tribes of the prairies. He continued with them until

late in April, and somewhat fully learned their language. The great prairie plains of southwestern Minnesota, over which Carver hunted with these Indians, he writes, "according to their account, are unbounded, and probably terminate on the coast of the Pacific ocean."

From the Indians he learned of "the River Oregon, or the River of the West, that falls into the Pacific ocean at the straits of Annian." This is the earliest record of this river and its name, now borne by a state. Twenty-five years afterward it received its present name, Columbia river, from the Massachusetts ship that discovered its mouth.

COUNCIL AND DEED OF LAND TO CARVER.

On the voyage of return down the Minnesota river to its mouth and down the Mississippi to the cave in the present eastern environs of St. Paul, Carver was accompanied by nearly three hundred of the Sioux, including, as he says, many of their chiefs. Arriving at the cave, where the many Sioux tribes or bands of the surrounding country were accustomed to meet for councils, as also for burying the bones of their dead in the mounds on the top of the bluff, Carver made a speech to those who had accompanied him, advising them to maintain relations of friendship with the English. The principal chief replied, promising this, thanking Carver for his promoting a peace between the Sioux and the Ojibways, and urging that the fur trade should be continued.

In addition to these speeches, which Carver recorded in his Travels, he wrote a deed, to which two of the chiefs assented, appending their marks, one a turtle (or a beaver), and the other a snake, by which they granted to him, and to his heirs and assigns forever, a vast tract east of the Mississippi river, including the greater part or all of the area that is now St. Paul. It extended from the Falls of St. Anthony along the river to the southeast end of Lake Pepin, and reached from the river and lake a distance of a hundred miles eastward.

This deed, given May 1, 1767, was not mentioned in the early editions of Carver's Travels; but after his death is was published by Dr. Lettsom, as before noted, in the third edition. The probable reasons for the author's silence in his book are well stated by Durrie and Draper in an important paper in the sixth volume of the Wisconsin Historical Society Collections, 1872 (pages 220-270). Carver, having gone to England to publish his explorations, endeavored to secure recognition of his ownership, according to the terms of the deed, from the king and his council, before whom he was granted a hearing in February, 1775; but the Revolutionary War and Carver's death caused the claim to remain undecided.

As written by Carver and signed by two Sioux chiefs, the deed conveyed about 11,500 square miles in the present states of Minnesota and Wisconsin, reading thus:

To Jonathan Carver, a chief under the most mighty and potent George the Third, King of the English and other nations, the fame of whose courageous warriors have reached our ears, and has been more fully told us by our good brother Jonathan aforesaid, whom we rejoice to see come among us, and bring us good news from his country. We, chiefs of the Naudowissies, who have hereto set our seals, do by these presents for ourselves and heirs for ever, in return for the many presents, and other good services done by the said Jonathan to ourselves and allies, give, grant, and convey to him the said Jonathan, and to his heirs and assigns for ever, the whole of a certain tract or territory of land, bounded as follows: (viz.) from the fall of St. Anthony, running on the east banks of the Mississippi, nearly south-east, as far as the south end of Lake Pepin, where the Chipeway river joins the Mississippi, and from thence eastward five days travel, accounting twenty English miles per day, and from thence north six days travel, at twenty English miles per day, and from thence again to the fall of St. Anthony, on a direct straight line. We do for ourselves, heirs, and assigns, for ever, give unto the said Jonathan, his heirs and assigns, for ever, all the said lands, with all the trees, rocks, and rivers therein, reserving for ourselves and heirs the sole liberty of hunting and fishing on land not planted or improved by the said Jonathan, his heirs and assigns, to which we have affixed our respective seals, at the great cave, May the first, one thousand seven hundred and sixty-seven.

Hawnopawjatin [with his mark or totem of a turtle or a beaver].

Otohtongoomlisheaw [with his mark or totem of a snake].

By the terms of the deed, its land grant had a maximum width of 120 miles on the line drawn due north to form its east boundary; and from the north end of that line the northern or northwestern boundary ran southwesterly in a straight course about 175 miles to the Falls of St. Anthony. The side formed by the river and lake, in their irregularly meandering but generally southeastward course, extends on a direct line between its ends about 70 miles.

Measuring due east 100 miles from the foot of lake Pepin and the mouth of the Chippewa river, the southeast corner of this grant is found in the central part of Wood county, Wisconsin, about five miles southeast of Pittsville. Thence the east boundary, measured due north 120 miles, passes about six miles east of Marshfield, Wis., through the west part of Marathon county, and along the east line of Taylor and Price counties, to the northeast corner in Iron county, about two miles southeast of Mercer, Wis. On the northwest, the straight line running thence to the Falls of St. Anthony passes near Rossville in Sawyer county, across Red Cedar and Upper Turtle lakes, in Barron county, and by the railway towns of Turtle Lake and Amery, crosses the St. Croix about two miles north of the mouth of Apple river, and crosses the central part of White Bear Lake in Minnesota.

The northwest boundary of the grant, thus drawn according to the exact terms of the description, lies wholly north of the area of St. Paul; but if that boundary were drawn due east from the Falls of St. Anthony, which might be the purpose of the description, it would cross the northern part of St. Paul, passing close north of Lake Como and across Lake Phalen.

Within the described boundaries the grant had a total area of 11,500 square miles, approximately, as before noted, of which only about 325 square miles are in Minnesota, comprising somewhat more than half of Ramsey and Washington counties.

The centennial anniversary of this council and treaty was celebrated by the Minnesota Historical Society on May 1, 1867; and its proceedings, including an address on "The Life and Explorations of Jonathan Carver," by Rev. John Mattocks, are published in Volume II of this society's Historical Collections (pages 257-284).

GRAND PORTAGE, THE OLDEST TOWN IN MINNESOTA

Not being able to purchase at Prairie du Chien the goods needed for farther westward explorations among the Indians, Carver went northward by the canoe route of the Mississippi, Chippewa, upper St. Croix and Brulé rivers and Lake Superior to Grand Portage, the most eastern and oldest white settlement of Minnesota. From this point on the north shore of Lake Superior a portage of about nine miles was made by canoe voyageurs, in the service of the fur traders, to the Pigeon river, on the northern boundary of Minnesota, above its principal rapids and falls. Probably during the period of Verendrye's explorations, this place became the chief point for landing goods from the large canoes used in the navigation of the Great Lakes, and for their being dispatched onward, from the end of this long portage, in smaller canoes to the many trading posts of all the rich fur country northwest of Lake Superior, including Rainy lake, the Lake of the Woods, Winnipeg, and the vast region of the Red, Assiniboine, and Saskatchewan rivers.

Grand Portage was already a most important rendezvous and trading post in 1767, when Carver went there in the hope of purchasing goods. At the time of the Revolutionary War, as Gen. James H. Baker has well said, it was the "commercial emporium" of the northwestern fur trade. Its prominence is shown by the writings of Alexander Henry, who arrived there in his northwestern travels, June 28, 1775; later by the journals of his nephew, bearing the same name, in 1800 to 1803; and by Sir Alexander Mackenzie's "General History of the Fur Trade from Canada to the Northwest," published in 1801.

In Volume VIII of the Minnesota Historical Society Collections, Captain Russell Blakeley gave, by extracts from these and other writers, an excellent portrayal of the commerce and mode of life of these early English-speaking explorers and merchants of Minnesota. With the removal of the great fur companies' posts, in the years 1801 to 1804, to the New Fort, named in 1807 Fort William, in honor of William McGillivray, of the

Northwest Company, situated at the mouth of the Kaministiquia river in Canada, Grand Portage lost much of its prestige; but it continued through all that century, extending almost to the present time, to be the base of an important canoe route to the Far Northwest.

Gen. James H. Baker writes as follows, in an address delivered in 1898 before the Minnesota Historical Society, published in Volume IX of this series of Historical Collections:

Fort William, built in 1801 to 1804, on the Kaministiquia river, was the chief western fort of the Northwest Company. Another important fort, of earlier date, was on our own soil, at the southern terminus of the Grand Portage. The first important road, lying partly in our state, was the one built between these two forts, the bridges being made of cedar logs, the remains of some of which I myself have seen. The road was thirty-six miles long, and was built in the earliest years of this century.

The locality called Grand Portage, at the site of the old trading post and fort, on the south end of the portage of this name, is on a small crescent-shaped bay, which has an island at its entrance, 146 miles from Duluth. There is still a band of Chippewa Indians located there. I have read, at Fort William, in a journal of one of the employes of the Northwest Company, a very minute and detailed account, in a rude diary, of the scenes of enterprise and traffic which he saw at Grand Portage in the summer of 1800. It appears that at that time there stood in the center of the semicircular shore of this bay a large fort, well picketed, enclosing several acres of ground. I have camped upon the spot several days, and found the place most eligibly situated for the purposes intended. Here, the diary says, was a house for officers and men, and a building for storage and stores. There was a canoe yard containing one hundred canoes of all sizes. Seventy canoes were contracted for annually for the commerce of that place. His diary notes that on July 3d, 1800, thirty-five great canoes arrived from Mackinaw, each carrying from three to five tons of goods, with eight voyageurs to a canoe. Over seventy canoes had already arrived from the west, coming from Lake Winnipeg through Rainy river, from the Saskatchewan, and from the Athabasca and Great Slave lakes. These were laden with furs and pelts. The thirty-five great canoes, from Montreal, 1800 miles away, were laden with a year's supply of goods, foods, liquors, tea, etc. Grand Portage was at that time, and as early at least as 1767, the grand exchange and distributing center for the fur trade in that part of the world. The factors themselves were present for the great annual settlement of business. The diary goes on to

relate that several hundred white men were there assembled, and that over seven hundred Indian women were retained by the company to scrape and clean the skins, and to make up the packages of pelts. The writer describes the scene as having all the air of a busy city.

Carver gives the following description of his canoe voyage from the Brulé river along the shores of Lake Superior, past its western end, called by him West bay, and of his coming in July, 1767, to Grand Portage.

The latter end of July I arrived, after having coasted through West Bay, at the Grand Portage, which lies on the north-west borders of Lake Superior. Here those who go on the north-west trade, to the Lakes De Pluye, Dubois [Rainy lake and the Lake of the Woods], &c., carry over their canoes and baggage about nine miles, till they come to a small number of lakes, the waters of some of which descend into Lake Superior, and others into the River Bourbon [Nelson river]. Lake Superior from West Bay to this place is bounded by rocks, except towards the south-west part of the Bay where I first entered it, there it was tolerably level.

At the Grand Portage is a small bay, before the entrance of which lies an island that intercepts the dreary and uninterrupted view over the Lake which otherwise would have presented itself, and makes the bay serene and pleasant. Here I met a large party of the Killistinoe and Assinipoil Indians [Crees and Assiniboines], with their respective kings and their families. They were come to this place in order to meet the traders from Michillimackinac, who make this their road to the north-west.

CARVER'S MAPS.

The map of Carver's Travels shows, in such details as his observations and inquiries permitted, the greater part of Minnesota, excepting its western border, and the country eastward so far as to include lakes Michigan and Superior; for, after leaving Grand Portage, he voyaged along the northern and eastern shores of Lake Superior to the Falls of St. Mary. His routes are marked by dotted lines. The next winter, of 1767-68, he spent at Mackinaw, and thence during the next summer returned by the way of Detriot and Niagara to Boston.

On this map the Minnesota river is noted as "River St. Pierre, call'd by the Natives Wadapawmenesoter," and at its

north side, nearly opposite to the site of New Ulm, three Sioux tepees are pictured, with the statement that "About here the Author Winter'd in 1766."

The several areas occupied by the Naudowessies (Sioux), Chipeways (Ojibways), Saukies (Sacs), Ottigaumies (Foxes), and Winnebagoes, are designated with dotted boundaries; and on the map of the third edition these boundaries are colored. The country of the Sioux is mapped as lying west of the Mississippi, excepting a relatively small area on its eastern side, extending from the St. Croix northwesterly to the Elk river, which is here called "River St. Francis."

A tract comprising the southern part of the land deeded by the Sioux chiefs to Carver is outlined. The north boundary of this tract runs due east from the Falls of St. Anthony, and its south boundary runs due east from the mouth of the Chippewa river. The length of the south line is a hundred miles, as described by the deed. From its east end, the east boundary of the tract runs due north, agreeing in its direction with the terms of the deed; but the length of this east boundary, which measures the width of the tract, terminated by the line drawn east from the Falls, is somewhat less than fifty miles, instead of "six days travel, at twenty English miles per day," which the deed required.

The lands mapped as belonging to the Indian tribes do not include this tract, which was bounded by the Ojibways on the north, the Sacs on the east, the Foxes on the south, and the Sioux on the west, being divided from the latter by the Mississippi and Lake Pepin.

Another map is inserted in this volume, showing the continent of North America northward from the Tropic of Cancer, excepting its then unknown northwestern part. The chief purpose of this map, besides indicating the continental relationship of the country explored by Carver, was to outline eleven districts close east of the Mississippi, which he described in the Appendix as noted on a foregoing page, recommending them for British colonization in the great region acquired from France in 1763. These districts are numbered from the northwest to the south

and east. In the first and second editions their boundaries are dotted; and in the third edition the districts are separately colored, making them the most conspicuous part of the map. The areas occupied by the Indian tribes are noted, but less definitely than on the other map and somewhat differently.

The second district in the series coincides more nearly with the area deeded to Carver than the tract previously noticed as outlined on a larger scale by the map of his travels. Carver wrote of it as follows, referring to his map of North America and the proposed series of colonies.

> No. II. This tract, as I have already described it in my Journals, exceeds the highest ecomiums I can give it; notwithstanding which it is entirely uninhabited, and the profusion of blessings that nature has showered on this heavenly spot return unenjoyed to the lap from whence they sprung. * * * This colony lying in unequal angles, the dimensions of it cannot be exactly given, but it appears to be on an average about one hundred and ten miles long, and eighty broad.

THE SIOUX DEED ANNULLED BY CONGRESS.

The numerous endeavors made by the heirs of Captain Carver and by others to whom their rights were assigned, for establishing their claims and ownership of the large tract of land deeded to him by the two Sioux chiefs, have been narrated by Rev. John Mattocks in his address at the Carver Centenary celebration in 1867, published in Volume II of the Minnesota Historical Society Collections; by John Fletcher Williams in his "History of the City of St. Paul and of the County of Ramsey," forming Volume IV in the same series, published in 1876; and most fully, with many documents submitted to the United States Congress, relating to the Carver claims, in an article by Daniel S. Durrie, to which Lyman C. Draper added important foot-notes, in Volume VI, pages 220-270, of the Wisconsin Historical Society Collections, published in 1872.

Between forty and forty-five years after Carver's death, the supposed rights of his heirs under the deed were denied and annulled in Congress by the Committees on Public Lands and on Private Land Claims. One of the grounds for this decision

was that no citizens, but only the state, whether Great Britain, as in 1767, or the United States after the treaty of 1783, could so receive ownership of lands from the aborigines.

Besides, as Col. Henry Leavenworth showed, the Sioux bands of the prairie region, who were with Carver, did not then, nor within the knowledge of history, possess any lands or hunting grounds east of the Mississippi. The wily chiefs granted to Carver what they did not own, nor was this tract of land then claimed by any of the Indian tribes. It was partly noted by Carver, on the map of his Travels, as a "road of war," that is, neutral ground. In another place the same map explains this term as follows: "All Countries not Possessed by any one Nation, where War Parties are often passing, is called by them the Road of War."

Carver had a statesmanlike and prophetic vision of the grand development of agriculture, commerce, and all the industries of civilization, that were to take the place of the red savage hunting tribes in the upper Mississippi region. In imagination he foresaw the great states now adjoining this mighty river. He aimed to plant there colonies of Great Britain, which he loved as a loyalist, unsympathetic with the resistance against grievances which led the colonies on the Atlantic coast to the Declaration of Independence and the War of the Revolution. One of the group of colonies which he depicted, to be founded on the Mississippi like the provinces of the eastern coast, he planned for his own benefit and honor, in accordance with his deed from the Sioux; but the outbreaking war between England and her American colonies, the death of Carver, in anxiety and poverty, at the comparatively early age of forty-eight years, and the unfavorable action of Congress, defeated his well-laid scheme for personal advantages to himself and his descendants.

Probably about twenty years before the date of Carver's treaty and deed, the Sioux of the Mille Lacs country had been vanquished by the Ojibways and compelled to retreat southward to the Mississippi river, taking new homes and hunting grounds there between the Minnesota river and Lake Pepin. As narrated in Chapter V, within about forty years after the time of

Carver, these Mdewakantonwan Sioux spread yet farther down the great river, and then and later, in Pike's and Leavenworth's time, they claimed ownership of much of the country on its eastern side; but when Carver's deed was given, nearly all the area of his grant belonged rather to the Foxes and Ojibways than to any of the Sioux or Dakotas in all their many bands and tribes.

The silence of Carver concerning the deed in his book of Travels was for prudential reasons, looking forward in hope of successful fulfillment of his plans to found a colony in that most favored district. We cannot doubt that he and his heirs acted in good faith, more so than the chiefs who signed the deed with their totem marks.

In 1818 and 1819 the Sioux chief Red Wing testified, for the heirs of Carver, that the two chiefs who gave the deed were his uncles. They were mentioned by Carver, in the closing part of his twelfth chapter, as follows:

> There is some difficulty attends an explanation of the manner in which the Indians distinguish themselves from each other. Besides the name of the animal by which every nation and tribe is denominated, there are others that are personal, and which the children receive from their mother.
>
> The chiefs are also distinguished by a name that has either some reference to their abilities, or to the hieroglyphick of their families; and these are acquired after they arrive at the age of manhood. Such as have signalized themselves either in their war or hunting parties, or are possessed of some eminent qualification, receive a name that serves to perpetuate the fame of these actions, or to make their abilities conspicuous.
>
> Thus the great warrior of the Naudowessies was named Ottah-tongoomlisheah, that is, the Great Father of Snakes; ottah being in English father, tongoom great, and lisheah a snake. Another chief was called Honahpawjatin, which means a swift runner over the mountains. And when they adopted me a chief among them, they named me Shebaygo, which signifies a writer, or a person that is curious in making hieroglyphicks, as they saw me often writing.

Chapter XI.

MACKENZIE, THE HENRYS, AND THOMPSON.

DURING the period of thirty-eight years between the explorations of Carver and Pike, additions to geographic knowledge of the area of Minnesota were made in its northern part by four prominent pioneers for the fur trade through their writings and records of surveys. In chronologic order these were Alexander Henry, Sir Alexander Mackenzie, David Thompson, and a nephew of the first, bearing the same name.

THE ELDER HENRY.

Alexander Henry, the elder, as he may be termed in distinction from his nephew, was born in New Brunswick, N. J., in August, 1739; accompanied the Canadian expedition of Sir Jeffrey Amherst in 1760; was engaged in the western fur trade, tributary to Montreal, during the next sixteen years; and published, in 1809, his "Travels and Adventures in Canada and the Indian Territories, between the Years 1760 and 1776." He traversed the canoe route along our northern boundary in 1775, returning by the same route the next year. He died in Montreal, April 14, 1824.

SIR ALEXANDER MACKENZIE.

The discoverer and explorer, in 1789, of the Mackenzie river, which bears his name, had four years earlier come to Grand Por-

tage, on the Minnesota shore of Lake Superior, at the beginning of his partnership in the fur trade. In his history of this great commercial industry, placed before his "voyages" in the same volume, published in 1801, Mackenzie narrates much concerning both the white men and the red men of northern Minnesota during the last third of the eighteenth century. Many names of streams, lakes, and portages, which he traversed there and far across the continent to the north and west, are first recorded in his pages and on the accompanying maps. In 1792-93 he crossed the Rocky Mountain and Coast ranges of the Canadian northwest, by the way of Peace river, to the Pacific ocean. He was born at Stornoway in the island of Lewis, on the west coast of Scotland, in 1763, as stated by Burpee on the authority of Prof. George Bryce; and died at Mulnain, near Dunkeld, Scotland, March 11, 1820.

THOMPSON'S GEOGRAPHIC WORK.

David Thompson, born in the parish of St. John, Westminister (now a part of London), England, April 30, 1770, became a most efficient explorer and cartographer of northern Minnesota and of the vast country reaching thence north to the Great Slave lake and Mackenzie river, and west to Fraser river and the Pacific. He began this work for the Hudson Bay Company at the age of nineteen years. In 1797 he transferred his service to the Northwest Fur Company, and in March and April of the next year traveled from the Red River valley to Red Lake and to Turtle lake, the latter situated on the most northern tributary of the Mississippi river, mapping these lakes and streams.

In 1813 and 1814, Thompson drafted for the Northwest Company, a large map of the Northwest Territory of Canada, and of northern Minnesota, which still remains in manuscript. His plats and field notes, largely consisting of determinations of latitude and longitude throughout the vast area of his explorations, fill about forty record books, in the Surveys Branch of the Crown Lands Department of Ontario, at Toronto. Parts of the map, and many notes of place names and other observations from

ALEXANDER MACKENZIE.

his field books, were published in 1897 by the late Dr. Elliott Coues, in his "New Light on the Early History of the Greater Northwest." The reader should also consult a valuable paper by Mr. J. B. Tyrrell, entitled "A Brief Narrative of the Journeys of David Thompson in North-western America," published in the Proceedings of the Canadian Institute for 1888 and also as a separate pamphlet of 28 pages.

After 1815, Thompson was during ten years a Canadian government surveyor, defining and mapping parts of the international boundary line, from the eastern provinces westward to the Lake of the Woods. He lived afterward nearly twenty years in Glengarry, Canada, and died in Longeuil, near Montreal, February 16, 1857. Hubert Howe Bancroft says of him: "In the westward explorations of the Northwest Company no man performed more valuable service, or estimated his achievement more modestly."

THE YOUNGER HENRY.

The journals of the younger Alexander Henry, edited by Coues and published in three volumes under the title before noted, are our earliest authority for many geographic names of northern Minnesota; and the editor added useful annotation, identifications of localities, and comparisons with the names given by Thompson, Mackenzie, and the elder Henry. Through these journals we are made acquainted with methods of fur trading which reflect little honor on the white men, their barter with the red men being largely the exchange of intoxicating liquors (chiefly rum, much diluted) for valuable furs, usually at an unjustly high rate of pecuniary gain to the white trader.

This Henry spent the years 1799 to 1808 in the region of Lake Winnipeg and the Red River, mainly occupying trading posts near the mouths of Park and Pembina rivers, and several times traversing the canoe route of our northern boundary. During 1808-11 he had charge of three different trading posts on the Saskatchewan river, living in close relationship with the Indian tribes. After a break in his manuscripts, leaving two years

and five months that have no record preserved, from May 17, 1811, to November 15, 1813, Henry spent the remaining half year of his life, noted in his journal, mostly at Astoria or Fort George, on the Columbia river near its mouth, with extensive canoe voyages up the Columbia and Willamette rivers. He died by drowning in the Columbia on May 22, 1814.

CANOE ROUTE FROM GRAND PORTAGE TO THE LAKE OF THE WOODS.

The lakes and streams of our international boundary from Lake Superior to the Lake of the Woods, with portages past waterfalls and rapids and across land divides, formed a great highway or thoroughfare of canoe travel and the commerce of the northwestern fur trade during more than a century. It began to be thus used in the time of Verendrye, and continued to be the chief route of this vast interior commerce until after Minnesota was admitted to the Union as a state. The building up of St. Paul, St. Anthony and Minneapolis, St. Cloud, and Crow Wing, on the Mississippi, and the later construction of railways, diverted the traffic into new courses. Frequent companies of voyageurs and birch canoes, called brigades, passed back and forth between lakes Superior and Winnipeg, carrying to the west provisions of food and articles for barter, and bringing eastward to the Great Lakes, on the way to Montreal and Quebec, the very valuable peltries of the beaver, bear, fox, marten, muskrat, otter, mink, lynx, wolf, and other fur-bearing animals.

Canoes about thirty-five feet long, propelled by a crew of eight to ten men, or sometimes even sixteen or eighteen men, were used for this commerce between Montreal and the north shore of Lake Superior. Their usual load was a hundred and twenty packages of ninety pounds each, or somewhat more than five tons, besides several passengers, in addition to the crew, and their personal baggage.

On the arrival at Fort William or at Grand Portage, the lading was transferred to smaller canoes, about twenty to twenty-five feet long, called "North canoes," adapted for shallower

lakes and streams and for being carried across portages. Five to eight voyageurs were commonly the crew for each of these smaller craft, by which the goods and provisions were transported onward to Lake Winnipeg and the Red, Assiniboine, and Saskatchewan rivers.

NARRATIVE BY JOSEPH LA FRANCE, 1740-42.

The earliest printed description of parts of northern Minnesota is found in a quarto volume of 211 pages, published by Arthur Dobbs in London in 1744, entitled "An Account of the Countries adjoining to Hudson's Bay." Its pages 29 to 45 contain a narrative by a French and Ojibway half-breed named Joseph la France, who in the years 1740 to 1742 traveled and hunted with the Indians through northern parts of this state and in Manitoba, starting from the north side of Lake Superior at Grand Portage and finally coming at the end of June, 1742, to York Fort or Factory, on Hudson bay at the mouth of the Hayes river.

He passed through Rainy lake in the later part of April and early May, 1740, and staid ten days at the Koochiching falls on the Rainy river near the outlet of this lake, where, for the purpose of fishing, the Moose band of Ojibways had "two great Villages, one on the North Side, and the other on the South Side of the Fall." These were respectively on or near the sites of Fort Frances and International Falls.

The next ten days were occupied by the canoe journey down the Rainy river to "Lake Du Bois, or Des Isles" (the Lake of the Woods). Of the region through which this river flows he said: "The whole Country along its Banks is full of fine Woods, in which are great Variety of Wild-fowl and Beasts, as wild Beaver, Stags, Elk, Deer, &c., and the River and adjoining Lakes full of excellent Fish."

La France staid a month on an island of the Lake of the Woods with the Ojibways of the Moose and Sturgeon bands, fishing and hunting. He next passed down the Winnipeg river, portaging past about thirty falls or rapids, and arrived at Lake

Winnipeg in September. The autumn was spent in hunting beavers with the Cree Indians east of this lake.

From the Indians he learned of Red lake in Minnesota, but erroneously supposed it to be west instead of south of Lake Winnipeg, the description being as follows: "On the West Side of this Lake the Indians told him a River enter'd it, which was navigable with Canoes; it descended from Lac Rouge, or the Red Lake, called so from the Colour of the Sand; they said there were two other Rivers run out of that Lake, one into the Mississippi, and the other Westward, into a marshy Country, full of Beavers." This is our earliest descriptive notice of the Red River valley.

In the spring of 1741, La France made a canoe on Lake Winnipeg, and at the beginning of summer passed to the "Little Lake Ouinipique," now called Lake Manitoba, west of which were the Assiniboines of the Meadows, that is, the Prairies. Farther north lived the Assiniboines of the Woods, perhaps meant for the Wood Crees; and southward were "the Nation of Beaux Hommes," and yet farther south, on the west side of the Lake of the Woods as shown by the accompanying map, were "the Sieux Indians."

During the summer and autumn of that year, La France canoed to "the Lake Du Siens * * * about 100 Leagues from the other." This was probably Rice lake in Minnesota, on the Wild Rice river near its sources, and about fifteen to twenty miles northwest of Lake Itasca. He described it thus: "The Lake Siens is but small, being not above 3 Leagues in Circuit; but all around its Banks, in the shallow Water and Marshes, grows a kind of wild oats, of the Nature of Rice; the outward Husk is black, but the Grain within is white and clear like Rice; this the Indians beat off into their Canoes, and use it for Food." According to this identification, the "River Du Siens" of La France is our Red River; the Fork mentioned by him is apparently at the mouth of the Wild Rice river; and the eastern tributary which he noted would be the Red Lake river, called "a rapid River from the Mountains [highlands east of the broad Red river valley], full of Falls, upon which the Nation Du Cris Panis Blanc inhabit, who are still a Tribe of the Christineaux" [Crees].

Referring to that eastern river, the narrative continues: "All the Country adjoining this River is also full of Beavers. Here the Winter overtook him, and he was obliged to part with his Canoe, and travelled and hunted through that Country for six Months, in which Time he passed Northwards near 100 Leagues, but would have been much more, had he followed the Course of the River in Summer in his Canoe." He arrived at Lake Cariboux in March, 1742, whence the River Cariboux flowed northward, these being probably Lake St. Martin and the Dauphin river of today, east of the northern narrow part of Lake Manitoba.

Thence La France passed eastward to the larger part of Lake Winnipeg, north of its Narrows, which, however, not knowing it to belong to Lake Winnipeg, he called Lake Pachegoia. Of the Saskatchewan river he said: "The River De vieux Hommes runs from the West for about 200 Leagues, and falls into this Lake, * * * it has a strong Current and is always muddy, but there are no Falls upon it."

With a large company of the Cree Indians in a hundred of their small canoes, mostly carrying two men in each canoe, La France descended the Nelson and Hayes rivers, to York Fort, reaching it on the 29th of June, 1742. Like Radisson, who visited the Crees eighty years before, he much emphasizes the smallness of their canoes, as follows: "The Indians being obliged to go ashore every Day to hunt for Provisions, delays them very much in their Voyages; for their Canoes are so small, holding only two Men and a Pack of 100 Beaver Skins, that they can't carry Provisions with them for any Time. * * * A good Hunter among the Indians can kill 600 Beavers in a Season, and can carry down but 100, the rest he uses at home, or hangs them upon Branches of Trees, upon the Death of their Children as an Offering to them, or use them for Bedding and Coverings."

The map in this volume, based largely, for the region west and northwest of Lake Superior, on the narrative of La France, is a very bungling, bizarre, and widely erroneous attempt to delineate the rivers and lakes described or mentioned by him. For example, it separates the southern and northern parts of Lake

Winnipeg by a river communication of about four hundred miles, on which the lakes here identified as Lake Manitoba, Rice lake, and Lake St. Martin, are placed in this order from south to north.

I am indebted to Mr. J. B. Tyrrell, of Toronto, formerly of the Geological Survey of Canada, for directing my attention to this map and narrative, with the result that we thus bring to the notice of geographers and historians this early and interesting account of various localities in northern Minnesota and Manitoba.

Since the foregoing was set in type, another discussion of the journeyings of La France, written by Burpee in "The Search for the Western Sea" (pages 222-233), very recently published, has come to my knowledge and is found to differ somewhat from my conclusions here stated. After weighing his reasons for the parts differently understood by him, I still think the lakes and rivers successively visited by La France to be here rightly identified, including his coming south in 1741 to the Rice lake of northwestern Minnesota, renowned among the Indians of that region.

JOURNEY OF THE ELDER HENRY, 1775.

The following extracts, before used by Captain Russell Blakeley in Volume VIII of the Minnesota Historical Society Collections, are from the elder Henry's "Travels and Adventures in Canada," etc., (pages 236-246), describing his expedition along the northern border of the area of this state.

On the 10th day of June, 1775, I left the Sault, with goods and provisions to the value of three thousand pounds sterling, on board twelve small canoes and four larger ones. The provisions made the chief bulk of the cargo, no further supply being obtainable till we should have advanced far into the country. Each small canoe was navigated by three men, and each larger one by four. * * *

At the Grand Portage I found the traders in a state of extreme reciprocal hostility, each pursuing his interests in such a manner as might most injure his neighbor. The consequences were very hurtful to the morals of the Indians.

The transportation of the goods at this grand portage, or great carrying-place, was a work of seven days of severe and dangerous exertion, at the end of which we encamped on the river Aux Groseilles [Pigeon river]. * * *

On the eighth [day of July] we ascended the Groseilles to the carrying-place called the Portage du Perdrix, where the river falls down a precipice of the height of a hundred feet. * * * [The description of this route from Grand Portage will be given chiefly from Sir Alexander Mackenzie.]

On the twentieth [of July] we reached Lake Sagunac, or Sagnaga, distant sixty leagues from the Grand Portage. This was the hithermost post in the northwest, established by the French; and there was formerly a large village of Chipeways here, now destroyed by the Nadowessies [Sioux]. I found only three lodges, filled with poor, dirty and almost naked inhabitants, of whom I bought fish and wild rice, which latter they had in great abundance. When populous, this village used to be troublesome to the traders, obstructing their voyages, and extorting liquor and other articles. * * *

We now entered Lake a la Pluie, which is fifteen leagues long, by five broad. * * *

The River a la Pluie is forty leagues long, of a gentle current. * * *There were perfect solitudes, not even a canoe presenting itself, along my whole navigation of the stream. I was greatly struck with the beauty of the scene, as well as with its fitness for agricultural settlements, in which provisions might be raised for the northwest.

On the thirtieth, we reached the Lake of the Woods, or Lake des Iles, at the entrance of which was an Indian village, of a hundred souls. * * *

From this village we received ceremonious presents. The mode with the Indians is, first to collect all the provisions they can spare, and place them in a heap; after which they send for the trader, and address him in a formal speech. They tell him that the Indians are happy in seeing him return to their country; that they have been long in expectation of his arrival; that their wives have deprived themselves of their provisions, in order to afford him a supply; that they are in great want, being destitute of every thing, and particularly of ammunition and clothing; and that what they most long for is a taste of his rum, which they uniformly denominate milk.

The presents, in return, consisted in one keg of gunpowder, of sixty pounds weight; a bag of shot, and another of powder, of eighty pounds each; a few smaller articles, and a keg of rum. The last appeared to be the chief treasure, though on the former depended the greater part of their winter's subsistence.

In a short time, the men began to drink, while the women brought me a further and very valuable present, of twenty bags of rice. This I returned with goods and rum, and at the same time offered more, for an additional supply of rice. A trade was opened, the women bartering rice, while the men were drinking. Before morning, I had purchased a hundred bags, of nearly a bushel measure each. Without a large quantity of rice, the voyage could not have been prosecuted to its completion. * * *

The Lake of the Woods is thirty-six leagues long. On the west side is an old French fort or trading-house, formerly frequented by numerous bands of Chipeways, but these have since been almost entirely destroyed by the Nadowessies. * * *

On the sixteenth [of August] we reached Lake Winipegon, at the entrance of which is a large village of Christinaux. * * *

MACKENZIE'S DESCRIPTION OF THIS ROUTE.

Sir Alexander Mackenzie in his "General History of the Fur Trade from Canada to the Northwest" (forming a part of his "Voyages from Montreal * * * in the years 1789 and 1793"), after a description of the canoe route from Lachine, near Montreal, by way of the Ottawa, Mattawa and French rivers, and through Lakes Huron and Superior to the Grand Portage, wrote of the fur trade there and of the partly laborious and difficult route thence upon our northern boundary, as follows:

At length they all arrive at the Grande Portage, which is one hundred and sixty leagues from St. Mary's, and situated on a pleasant bay on the north side of the lake, in latitude 48. North and longitude 90. West from Greenwich. * * *

At the entrance of the bay is an island which screens the harbour from every wind except the South. * * * The bottom of the bay, which forms an amphitheatre, is clear and inclosed; and on the left corner of it, beneath an hill, three or four hundred feet in height, and crowned by others of a still greater altitude, is the fort, picketed in with cedar pallisadoes, and inclosing houses built with wood and covered with shingles. They are calculated for every convenience of trade as well as to accommodate the proprietors and clerks during their short residence there. The North men live under tents; but the more frugal pork-eater lodges beneath his canoe. * * *

When they are arrived at the Grande Portage, which is near nine miles over, each of them has to carry eight packages of such goods and provisions as are necessary for the interior country. * * *

Having finished this toilsome part of their duty, if more goods are necessary to be transported, they are allowed a Spanish dollar for each package; and so inured are they to this kind of labour, that I have known some of them set off with two packages of ninety pounds each, and return with two others of the same weight, in the course of six hours, being a distance of eighteen miles over hills and mountains. This necessary part of the business being over, if the season be early they have some respite, but this depends upon the time the North men begin to arrive from their winter quarters, which they commonly do early in July. At this period, it is necessary to select from the pork-eaters a number of men, among whom are the recruits, or winterers, sufficient to man the North canoes necessary to carry, to the river of the Rainy lake, the goods and provisions requisite for the Athabasca country; as the people of that country (owing to the shortness of the season and length of the road [they] can come no further) are equipped there, and exchange ladings with the people of whom we are speaking, and both return from whence they came. * * *

The North men, being arrived at the Grande Portage, are regaled with bread, pork, butter, liquor, and tobacco, and such as have not entered into agreements during the winter, which is customary, are contracted with, to return and perform the voyage for one, two, or three years; their accounts are also settled, and such as choose to send any of their earnings to Canada, receive drafts to transmit to their relations or friends; and as soon as they can be got ready, which requires no more than a fortnight, they are again dispatched to their respective departments. * * *

The people being dispatched to their respective quarters, the agents from Montreal, assisted by their clerks, prepare to return there, by getting the furs across the portage, and re-making them into packages of one hundred pounds weight each, to send them to Montreal, where they commonly arrive about the month of September.

The mode of living at the Grande Portage is as follows: The proprietors, clerks, guides, and interpreters, mess together, to the number of sometimes an hundred, at several tables, in one large hall, the provision consisting of bread, salt pork, beef, hams, fish, and venison, butter, peas, Indian corn, potatoes, tea, spirits, wine, &c., and plenty of milk, for which purpose several milch cows are constantly kept. The mechanics have rations of such provision, but the canoe-men, both from the North and Montreal, have no other allowance here, or in the voyage, than Indian corn and melted fat. The corn for this purpose is prepared before it leaves Detroit, by boiling it in a strong alkali, which takes off the outer husk; it is then well washed, and carefully dried upon stages, when it is fit for use. One quart of this is boiled for two hours, over a moderate fire, in a gallon of water; to which, when it

has boiled a small time, are added two ounces of melted suet; this causes the corn to split, and in the time mentioned makes a pretty thick pudding. If to this is added a little salt (but not before it is boiled, as it would interrupt the operation), it makes an wholesome, palatable food, and easy of digestion. This quantity is fully sufficient for a man's subsistence during twenty-four hours. * * * The Americans call this dish hominee.

The trade from the Grande Portage is, in some particulars, carried on in a different manner with that from Montreal. The canoes used in the latter transport are now too large for the former, and some of about half the size are procured from the natives, and are navigated by four, five, or six men, according to the distance which they have to go. They carry a lading of about thirty-five packages, on an average; of these twenty-three are for the purpose of trade, and the rest are employed for provisions, stores, and baggage. In each of these canoes are a foreman and steersman; the one to be always on the look out, and direct the passage of the vessel, and the other to attend the helm. They also carry her, whenever that office is necessary. The foreman has the command, and the middle-men obey both; the latter earn only two-thirds of the wages which are paid the two former. Independent of these a conductor or pilot is appointed to every four or six of these canoes, whom they are all obliged to obey; and is, or at least is intended to be, a person of superior experience, for which he is proportionably paid.

In these canoes, thus loaded, they embark at the North side of the portage, on the river Au Tourt [Pigeon river], which is very inconsiderable; and after about two miles of a Westerly course, is obstructed by the Partridge Portage, six hundred paces long. In the spring this makes a considerable fall, when the water is high, over a perpendicular rock of one hundred and twenty feet. From thence the river continues to be shallow, and requires great care to prevent the bottom of the canoe from being injured by sharp rocks, for a distance of three miles and an half to the Prairie or Meadow, when half the lading is taken out and carried by part of the crew, while two of them are conducting the canoe among the rocks, with the remainder, to the Carreboenf Portage, three miles and an half more, when they unload and come back two miles, and embark what was left for the other hands to carry, which they also land with the former; all of which is carried six hundred and eighty paces, and the canoe led up against the rapid.

From hence the water is better calculated to carry canoes, and leads by a winding course to the North of West three miles to the Outard Portage, over which the canoe, and every thing in her, is carried for two thousand four hundred paces. At the further end is a very high hill to descend, over which hangs a rock upwards of seven hundred

feet high. Then succeeds the Outard Lake [South Fowl and North Fowl lakes], about six miles long, lying in a North-West course, and about two miles wide in the broadest part. After passing a very small rivulet, they come to the Elk Portage, over which the canoe and lading are again carried one thousand one hundred and twenty paces; when they enter the lake of the same name [now called Moose lake], which is an handsome piece of water, running North-West about four miles, and not more than one mile and an half wide. Here is a most excellent fishery for white fish, which are exquisite. They then land at the Portage de Cerise [Cherry], over which, and in the face of a considerable hill, the canoe and cargo are again transported for one thousand and fifty paces. This is only separated from the second Portage de Cerise by a mud pond (where there is plenty of water lilies), of a quarter of a mile in length; and this is again separated by a similar pond from the last Portage de Cerise, which is four hundred and ten paces. Here the same operation is to be performed for three hundred and eighty paces.

They next enter on the Mountain Lake, running North-West by West, six miles long, and about two miles in its greatest breadth. In the centre of this lake, and to the right, is the Old Road, by which I never passed; but an adequate notion may be formed of it from the road I am going to describe, and which is universally preferred. This is first, the small new portage over which every thing is carried for six hundred and twenty-six paces, over hills and gullies; the whole is then embarked on a narrow line of water [Rove lake], that meanders South-West about two miles and an half. It is necessary to unload here, for the length of the canoe, and then proceed West half a mile to the new Grande Portage, which is three thousand one hundred paces in length, and over very rough ground, which requires the utmost exertions of the men, and frequently lames them; from hence they approach the Rose Lake, the portage of that name being opposite to the junction of the road from the Mountain Lake. They then embark on the Rose Lake, about one mile from the East end of it, and steer West by South, in an oblique course, across it two miles; then West North-West passing the Petite Perche to the Marten Portage, three miles. *

Over against this is a very high, rocky ridge, on the South side, called Marten Portage, which is but twenty paces long, and separated from the Perche Portage, which is four hundred and eighty paces, by a mud pond covered with white lilies. From hence the course is on the lake of the same name [now South lake], West-South-West three miles to the height of land, where the waters of the Dove or Pigeon River terminate, and which is one of the sources of the great St. Laurence in this direction. Having carried the canoe and lading over it, six hundred and seventy-nine paces, they embark on the lake of Hauteur de Terre [now North lake], which is in the shape of an horse-shoe. (The route

which we have been travelling hitherto leads along the high rocky land or bank of Lake Superior on the left. The face of the country offers a wild scene of huge hills and rocks, separated by stony valleys, lakes, and ponds. Wherever there is the least soil, it is well covered with trees.) The lake is entered near the curve, and left at the extremity of the Western limb, through a very shallow channel, where the canoe passes half loaded for thirty paces with the current, which leads through the succeeding lakes and rivers, and disembogues itself, by the river Nelson, into Hudson's-Bay. The first of these is Lac de pierres a fusil [Gunflint lake], running West-South-West, seven miles long and two wide, and, making an angle at North-West one mile more, becomes a river for half a mile, tumbling over a rock and forming a fall and portage, called the Escalier [Stairs], of fifty-five paces; but from hence it is neither lake or river, but possesses the character of both, and ends between large rocks, which cause a current or rapid, falling into a lake-pond for about two miles and an half, West-North-West, to the portage of the Cheval du Bois. Here the canoe and contents are carried three hundred and eighty paces, between rocks; and within a quarter of a mile is the Portage des Gros Pins, which is six hundred and forty paces over an high ridge. The opposite side of it is washed by a small lake three miles round; and the course is through the East end or side of it, three quarters of a mile North-East, where there is a rapid. An irregular, meandering channel, between rocky banks, then succeeds for seven miles and an half to the Maraboeuf Lake, which extends North four miles, and is three quarters of a mile wide, terminating by a rapid and decharge, of one hundred and eighty paces, the rock of Saginaga being in sight, which causes a fall of about seven feet, and a portage of fifty-five paces.

Lake Saginaga takes its name from its numerous Islands. Its greatest length from East to West is about fourteen miles, with very irregular inlets. It is nowhere more than three miles wide, and terminates at the small portage of La Roche, of forty-three paces. From thence is a rocky, stony passage of one mile, to Prairie Portage, which is very improperly named, as there is no ground about it that answers to that description, except a small spot at the embarking place at the West end: to the East is an entire bog; and it is with great difficulty that the lading can be landed upon stages, formed by driving piles into the mud and spreading branches of trees over them. The portage rises on a stony ridge, over which the canoe and cargo must be carried for six hundred and eleven paces. This is succeeded by an embarkation on a small bay, where the bottom is the same as has been described in the West end of Rose Lake, and it is with great difficulty that a laden canoe is worked over it, but it does not comprehend more than a distance of two hundred yards. From hence the progress continues through irregular channels [of Otter Track lake], bounded by rocks,

in a Westerly course for about five miles, to the little Portage des Couteaux, of one hundred and sixty-five paces, and the Lac des Couteaux [Knife lake], running about South-West by West twelve miles, and from a quarter to two miles wide. A deep bay runs East three miles from the West end, where it is discharged by a rapid river, and after running two miles West it again becomes still water. In this river are two carrying places, the one fifteen, and the other one hundred and ninety paces. From this to the Portage des Carpes is one mile North-West, leaving a narrow lake on the East that runs parallel with the Lake des Couteaux, half its length, where there is a carrying place, which is used when the water in the river last mentioned is too low. The Portage des Carpes is three hundred and ninety paces, from whence the water [of Sucker lake] spreads irregularly between rocks, five miles North-West and South-East to the portage of Lac Bois Blanc, which is one hundred and eighty paces. Then follows the lake of that name [Basswood lake], but I think improperly so called, as the natives name it the Lake Pascau Minac Sagaigan, or Dry Berries.

Before the small pox ravaged this country, and completed what the Nodowasis in their warfare had gone far to accomplish, the destruction of its inhabitants, the population was very numerous; this was also a favorite port, where they made their canoes, &c., the lake abounding in fish, the country round it being plentifully supplied with various kinds of game, and the rocky ridges, that form the boundaries of the water, covered with a variety of berries.

When the French were in possession of this country, they had several trading establishments on the islands and banks of this lake. Since that period, the few people remaining, who were of the Algonquin nation, could hardly find subsistence; game having become so scarce that they depended principally for food upon fish, and wild rice which grows spontaneously in these parts.

This lake is irregular in its form, and its utmost extent from East to West is fifteen miles; a point of land, called Point au Pin, jutting into it, divides it in two parts: it then makes a second angle at the West end, to the lesser Portage de Bois Blanc, two hundred paces in length. This channel is not wide, and is intercepted by several rapids in the course of a mile; it runs West-North-West to the Portage des Pins, over which the canoe and lading is again carried four hundred paces. From hence the channel is also intercepted by very dangerous rapids for two miles Westerly, to the point of Portage du Bois, which is two hundred and eighty paces. Then succeeds the portage of Lake Croche one mile more, where the carrying place is eighty paces, and is followed by an embarkation on that lake [Crooked lake], which takes its name from its figure. It extends eighteen miles, in a meandering form, and in a westerly direction; it is in general very narrow, and at

about two-thirds of its length becomes very contracted, with a strong current.

Within three miles of the last portage is a remarkable rock, with a smooth face, but split and cracked in different parts, which hang over the water. Into one of its horizontal chasms a great number of arrows have been shot, which is said to have been done by a party of the Nodowasis or Sieux, who had done much mischief in this country, and left these weapons as a warning to the Chebois or natives, that, notwithstanding its lakes, rivers, and rocks, it was not inaccessible to their enemies.

Lake Croche is terminated by the Portage de Rideau [Curtain], four hundred paces long, and derives its name from the appearance of the water, falling over a rock of upwards of thirty feet. Several rapids succeed, with intervals of still water, for about three miles to the Flacon portage, which is very difficult, is four hundred paces long, and leads to the Lake of La Croix [Cross], so named from its shape. It runs about North-West eighteen miles to the Beaver Dam, and then sinks into a deep bay nearly East. The course to the portage is West by North for sixteen miles more from the Beaver Dam; and into the East bay is a road which was frequented by the French, and followed through lakes and rivers until they came to Lake Superior by the river Caministiquia, thirty miles East of the Grand Portage. [Major Long took that route in 1823.]

Portage la Croix is six hundred paces long: to the next portage is a quarter of a mile, and its length is forty paces; the river winding four miles to Vermillion Lake, which runs six or seven miles North-North-West, and by a narrow strait communicates with Lake Namaycan [Sturgeon], which takes its name from a particular place at the foot of a fall, where the natives spear sturgeon. Its course is about North-North-West and South-South-East, with a bay running East, that gives it the form of a triangle; its length is about sixteen miles to the Nouvelle Portage. The discharge of the lake is from a bay on the left, and the portage one hundred and eighty paces, to which succeeds a very small river, from whence there is but a short distance to the next Nouvelle Portage, three hundred and twenty paces long. It is there necessary to embark on a swamp, or overflowed country, where wild rice grows in great abundance. There is a channel or small river in the centre of this swamp, which is kept with difficulty, and runs South and North one mile and a half, with deepening water. The course continues North-North-West one mile to the Chaudiere Portage, which is caused by the discharge of the waters running on the left of the road from Lake Naymaycan, which used to be the common route, but that which I have described is the safest as well as shortest. From hence there is some current though the water is wide spread, and its course about North by West three miles and an half to the Lac

de la Pluie [Rainy lake], which lies nearly East and West; from thence about fifteen miles is a narrow strait that divides the land into two unequal parts, from whence to its discharge is a distance of twenty-four miles. There is a deep bay running North-West on the right, that is not included, and is remarkable for furnishing the natives with a kind of soft, red stone, of which they make their pipes; it also affords an excellent fishery, both in the summer and winter; and from it is an easy, safe, and short road to the Lake du Bois (which I shall mention presently), for the Indians to pass in their small canoes, through a small lake and on a small river, whose banks furnish abundance of wild rice. The discharge of this lake is called Lake de la Pluie [Rainy] River, at whose entrance there is a rapid, below which is a fine bay, where there had been an extensive picketted fort and building when possessed by the French; the site of it is at present a beautiful meadow, surrounded with groves of oaks. From hence there is a strong current for two miles, where the water falls over a rock twenty feet [Koochiching falls], and, from the consequent turbulence of the water, the carrying place, which is three hundred and twenty paces long, derives the name of Chaudiere. Two miles onward is the present trading establishment, situated on an high bank on the North side of the river, in 48 degrees, thirty-seven minutes, North latitude.

Here the people from Montreal come to meet those who arrive from the Athabasca country, as has been already described, and exchange lading with them. This is also the residence of the first chief, or Sachem, of all the Algonquin tribes inhabiting the different parts of this country. He is by distinction called Nectam, which implies personal pre-eminence. Here also the elders meet in council to treat of peace or war.

This is one of the finest rivers in the North-West, and runs a course West and East one hundred and twenty computed miles; but in taking its course and distance minutely I make it only eighty. Its banks are covered with a rich soil, particularly to the North, which, in many parts, are clothed with fine open groves of oak, with the maple, the pine, and the cedar. The Southern bank is not so elevated, and displays the maple, the white birch, and the cedar, with the spruce, the alder, and various underwood. Its waters abound in fish, particularly the sturgeon, which the natives both spear and take with drag-nets. But notwithstanding the promise of this soil, the Indians do not attend to its cultivation, though they are not ignorant of the common process, and are fond of the Indian corn, when they can get it from us. * * *

We now proceed to mention the Lake du Bois [Lake of the Woods], into which this river discharges itself in latitude 49. North, and was formerly famous for the richness of its banks and waters, which abounded with whatever was necessary to a savage life. The French had several settlements in and about it; but it might be almost con-

cluded that some fatal circumstance had destroyed the game, as war and the small pox had diminished the inhabitants, it having been very unproductive in animals since the British subjects have been engaged in travelling through it; though it now appears to be recovering its pristine state. The few Indians who inhabit it might live very comfortably, if they were not so immoderately fond of spirituous liquors.

* * * The Lake du Bois is, as far as I could learn, nearly round, and the canoe course through the centre of it among a cluster of islands, some of which are so extensive that they may be taken for the main land. The reduced course would be nearly South and North. But following the navigating course, I make the distance seventy-five miles, though in a direct line it would fall very short of that length. At about two-thirds of it there is a small carrying place, when the water is low. The carrying place out of the lake is on an island, and named Portage du Rat, in latitude 49 degrees 37 minutes North and longitude 94 degrees 15 minutes West, and is about fifty paces long. The lake discharges itself at both ends of this island, and forms the River Winipic, which is a large body of water, interspersed with numerous islands, causing various channels and interruptions of portages and rapids. * * *

ADOPTION OF THE CANOE ROUTE AS THE INTERNATIONAL BOUNDARY.

Because the route so carefully and elaborately described by Mackenzie was the main pathway of the most important inland trade and commerce of both Canada and the United States, it was chosen to be the dividing line between these countries. With increasing clearness and accuracy of definition, this line was noted by successive international treaties and negotiations, in 1783, 1794, 1803, 1807, 1814, 1818, and 1842. Farther westward, beyond the Lake of the Woods, the 49th parallel was made the boundary, because during the negotiations for the Treaty of Utrecht, in 1713, it had been claimed by the Hudson Bay Company as the southern limit of its trade and jurisdiction. These reasons for the establishment of the national boundary by Great Britain and the United States, are well presented in two papers published in Volume VIII of the Minnesota Historical Society Collections, by Ulysses Sherman Grant and Alexander N. Winchell.

In the Treaty of 1783, terminating the Revolutionary War, the boundary was defined as extending along "the water communication" between Lake Superior and the Lake of the Woods. It remained with this very imperfect description nearly sixty years, although at various times under discussion of commissioners, with provisional surveys, until the Webster-Ashburton Treaty in 1842 gave it more definite terms by naming the Pigeon river, from its mouth, and the principal lakes through which the line extends.

Besides the great water parting between the St. Lawrence and Nelson river systems, the boundary in several other places passes across divides of minor drainage basins. It follows the old route of the fur traders and voyageurs. Because they went by a portage over a little drainage divide and thence passed westward along the south side of a large tract called Hunter's Island, about 800 square miles in area, instead of following the continuous water course, that tract belongs to Canada.

Chapter XII.

WILLIAM MORRISON AT LAKE ITASCA, AND OTHER TRADERS WHOSE NAMES ARE BORNE BY MINNESOTA COUNTIES.

TEN names of counties in this state, among its total list of eighty-five counties, commemorate pioneers of the fur trade with the Indians. Many others, during two hundred years from the first coming of Groseilliers and Radisson, traversed all portions of this state. Before the earliest agricultural settlements, the lone log-house trading posts of these forerunners of civilization were built on many of our thousands of beautiful lakes and streams. But only a very few left any diary or other written account or record. The most remarkable of them all, probably, in respect to keeping a journal of transactions and experiences in the frontier fur trade, was the younger Alexander Henry, noticed in the last preceding chapter.

The literature of exploration and development of Minnesota, so far as accomplished in the interests of the fur trade, is mainly limited to the four authors mentioned in the title of that chapter; but many of these traders, like William Morrison, who in the winter of 1803-04, and again in 1811-12, examined Lake Itasca and its small tributary streams, made journeys and discoveries which would appear of great significance in the history of our state if we had narratives of their lives and work.

THE MORRISON BROTHERS.

Morrison county, established by legislative act February 25, 1856, occupying the geographic center of Minnesota, was named for William Morrison, the first white man to see the lake forming the principal source of the Mississippi (unless he was preceded by French voyageurs of whom no record is preserved).

William Morrison was born in Montreal in 1780, and came to the Northwest, to engage in the fur trade, in 1802. He spent the first winter on one of the head streams of the Crow Wing river, and the second winter at Rice lake, northwest of Lake Itasca, which he visited in that winter or in the spring of 1804. He was employed at first for Sir Alexander Mackenzie and the New Northwest or XY Company, and later for the reorganized Northwest company until 1816; and during the next ten years for the American Fur Company, under John Jacob Astor. In the latter service he established a series of trading posts on or near the northern boundary of Minnesota from Grand Portage west to the Lake of the Woods. In 1826 he retired, and afterward lived in Canada, where he died August 7, 1866.

His brother, Allan Morrison, who was a trader at Crow Wing, transmitted to Governor Ramsey for the Minnesota Historical Society, under the date of February 17,1856, just preceding the act of the legislature which founded Morrison county, a letter from William Morrison, narrating his work in the fur trade and his visits to the source of our great river.

Allan Morrison, whose life as a pioneer of Minnesota may also be regarded as commemorated in the name of this county, was born in Canada about the year 1790; came to Fond du Lac and northern Minnesota, in the fur trade, associated with his brother William, in 1820; had charge of trading posts at Sandy lake, Leech lake, Red lake, Mille Lacs, and Crow Wing; and finally removed with the Indians to the White Earth Reservation, where he died November 28, 1878. He was a member of the first legislature of Minnesota Territory.

OTHER TRADERS HONORED BY COUNTY NAMES.

With the names of eminent explorers, as Beltrami, Carver, Cass, Hennepin, Le Sueur, Nicollet, Pope, and Stevens, borne by counties in Minnesota, the following ten counties, Aitkin, Brown, Faribault, Kittson, McLeod, Morrison (as already noted), Olmsted, Renville, Rice, and Sibley, are named in honor of men who came here primarily as fur traders. Each of these traders doubtless added to geographic knowledge of parts of our area which they traversed; and several of them attained to high preminence in business, commercial, and legislative affairs. It will be very desirable, therefore, to present here brief biographic notes of these fur traders who are honored in the nomenclature of Minnesota counties.

WILLIAM A. AITKIN.

The name of Aitkin county, established May 23, 1857, was at first commonly spelled Aiken, with which it is identical in pronunciation, but was changed to the present spelling by an act of the legislature, in 1872. This county was named for William A. Aitkin, a Scotch trader with the Ojibway Indians at Sandy lake, in the present east part of Aitkin county, who came into that region when a boy, about the year 1802, as a servant of a trader named John Drew. Aitkin married into an influential Indian family; was soon a trader on his own account; and rapidly advanced until in 1831 he took charge of the Fond du Lac department of the American Fur Company, making his headquarters at Sandy lake. He died in the autumn of 1851, and is buried on the bank of the Mississippi river, near the mouth of Swan river, in the north edge of Aitkin county.

JOSEPH R. BROWN.

Brown county, established February 20,1855, was named in honor of Joseph Renshaw Brown, who during many years was an

Indian trader, was one of the founders of Minnesota Territory, an editor, and one of the most influential members in the territorial legislature and in the Democratic branch of the convention for framing the state constitution. He was born in Harford county, Maryland, January 5, 1805; and died in New York City, November 9, 1870. When only fourteen years old, in 1819, he came to the area of Minnesota as a drummer boy with the troops that built Fort Snelling. As a trader and a leader in public affairs, he rendered much aid for the consummation of the treaties of Traverse des Sioux and Mendota in 1851, and opposed the Sioux outbreak, in 1862. He owned and published the Minnesota Pioneer, and later the Henderson Democrat. He was secretary of the Territorial Council in 1849-51, a member of the Council in 1854-5, and of the House in 1857.

JEAN B. FARIBAULT.

Faribault county, established February 20, 1855, was named for Jean Baptiste Faribault, who was engaged through the greater part of his life as a trader among the Indians, at first for the Northwest Fur Company. He was born at Berthier, Quebec, Canada, in 1774, and came to the Northwest in 1798, taking charge of a trading post on the Kankakee river near the south end of Lake Michigan. During the years 1799 to 1802 he was stationed at the Redwood trading post, situated on the Des Moines river, "about two hundred miles above its mouth," being in what is now the central part of Iowa. Coming to Minnesota in 1803, he took charge of a post at Little Rapids, on the Minnesota river a few miles above the sites of Chaska and Carver, where he remained several years. Afterward he was a trader on his own account at Prairie du Chien, Wisconsin, whence he removed to Pike island, at the mouth of the Minnesota river, in the spring of 1820, having been promised military protection by Colonel Leavenworth, under whose direction Fort Snelling was then being built. In 1826 Faribault built a substantial stone house for his family at Mendota, where he spent most of the remainder of his life, excepting that in the win-

ters during many years he traded with the Indians at Little Rapids. He died August 20, 1860, at the home of his daughter in Faribault, Minn., a city founded, at first as a Sioux trading post, by his eldest son, Alexander Faribault, for whom it was named.

An appreciative memoir of Jean B. Faribault, by General Sibley, was published in pages 168-179, Volume III, Minnesota Historical Society Collections.

NORMAN W. KITTSON.

Kittson county, established March 9, 1878, forming the northwest corner of Minnesota, had been previously called Pembina county. It was named for Norman Wolfred Kittson, one of the leading pioneers of this state. He was born in Sorel, Canada, March 5, 1814; came to Fort Snelling in 1834; was engaged in the fur trade with the Indians, and in transportation business, at this fort, Pembina, and St. Paul; was several years a member of the Territorial legislature, representing the Pembina district; was mayor of St. Paul in 1858; and became the director of steamboat traffic on the Red river, for the Hudson Bay Company, in 1864. He died suddenly, May 10, 1888, on his journey of return to Minnesota from the east.

MARTIN McLEOD.

McLeod county, established March 1, 1856, was named in honor of Martin McLeod, who was born in Montreal August 30, 1813, of Scotch parentage, and there received a liberal education. In 1836 be came to the Northwest, voyaging in an open boat on Lake Superior from its mouth to La Pointe, Wisconsin, and thence walking more than six hundred miles to the Pembina settlement on the Red River, where he arrived in December. The next March, having set out with two companions, young British officers, and Pierre Bottineau as guide, he came to the trading house of Joseph R. Brown at Lake Traverse, arriving March 21, after a journey of nineteen days and a most perilous

experience of hunger and cold due to successive blizzards, by one of which the two officers perished. Coming forward to Fort Snelling in April, 1837, he was afterward during many years engaged as a fur trader for Chouteau and Company, under the direction of General Sibley, being in charge of trading posts successively on the St. Croix river, at Traverse des Sioux, Big Stone lake, Lac qui Parle, and Yellow Medicine.

McLeod was a member of the Council in the Territorial legislature for the years 1849 to 1853, being president of the Council in 1853. He died November 20, 1860, on his farm to which he had removed his family in 1849, at Oak Grove, in Bloomington, Hennepin county. He was one of the charter members, in 1849, of the Minnesota Historical Society.

DAVID OLMSTED.

Olmsted county, established February 20, 1855, was named for Hon. David Olmsted, who during the previous year 1854 had been the first mayor of St. Paul. He was born in Fairfax, Vt., May 5, 1822; came to the Northwest, first to the Wisconsin lead mining region, in 1838; was a pioneer settler of Monona, Iowa, in 1840; engaged in trading with the Indians at Fort Atkinson, Iowa, in 1844; was a member of the convention which framed the state constitution of Iowa in 1846; came in 1848 to Long Prairie, Minnesota, when the Winnebago Indians were transferred there, and established a trading post, which he continued several years. He was a charter member of the Minnesota Historical Society, and a member of the Council in the first Territorial Legislature, 1849 and 1850, being its first president.

In 1853, having removed to St. Paul, Olmsted became proprietor and editor of the Minnesota Democrat, which under his management began its issue as a daily newspaper in May, 1854. After his term of one year as mayor of the new city, he removed in 1855 to Winona, where ill health compelled him, in 1857, to give up business, and he then returned to his old home in Vermont, where he died February 2, 1861.

JOSEPH RENVILLE.

Renville county, established February 20, 1855, was named for Joseph Renville, a half-breed (the son of a French father and Dakota mother), of whom Dr. Neill gave a very interesting sketch in the first volume of the Minnesota Historical Society Collections. Renville was born at or near the Kaposia village of the Dakotas, on the Mississippi a few miles below St. Paul, about the year 1779. After a few years at school in Canada, he became a voyageur for an English company in the fur trade of the Northwest. In the War of 1812 he received the appointment and rank of a captain in the British army, and led a company of Dakota (Sioux) warriors against the United States frontier. He was employed by Major Long as the interpreter in his expedition to the Red river and Lake Winnipeg, in 1823; and Keating, the historian of that expedition, derived from him a large amount of information relating to the Dakotas. Afterward, having become an agent of the American Fur company, Renville erected a trading house at Lac qui Parle, and resided there until his death, which was in March, 1846.

He was a friend of Rev. Thomas S. Williamson, who came as a missionary to the Dakotas of the Minnesota valley in 1835. "Renville warmly welcomed him," wrote Dr. Neill, "and rendered invaluable assistance in the establishment of the missions. Upon the arrival of the missionaries at Lac qui Parle, he provided them with a temporary home. He acted as interpreter, he assisted in translating the Scriptures, and removed many of the prejudices of the Indians against the white man's religion."

HENRY M. RICE.

Rice county, established March 5, 1853, was named for Hon. Henry Mower Rice, one of the two first United States senators of Minnesota, 1858 to 1863. He was born in Waitsfield, Vt., November 29, 1816; came west to Detroit, in 1835, and four years later to Fort Snelling; was during many years an agent of

the Chouteau Fur Company; aided in the negotiation of several Indian treaties, by which lands were ceded for white immigration in Minnesota; and was the delegate from this Territory in Congress, 1853 to 1857. Excepting when absent in Washington, he resided in St. Paul from 1849 onward, and was a most generous benefactor of this city. To Rice county he presented a valuable political and historical library. Senator Rice was a charter member of the Minnesota Historical Society, and was its president for the years 1864 to 1866. He died at San Antonio, Texas, while spending the winter months there, January 15, 1894.

HENRY H. SIBLEY.

Sibley county, established March 5, 1853, was named in honor of Gen. Henry Hastings Sibley, pioneer fur merchant, governor, and military defender of Minnesota. He was born in Detroit, Mich., February 20, 1811; went to Mackinaw, entering the service of the American Fur Company, in 1829; came to what is now Minnesota in 1834, as general agent in the Northwest for that company, with headquarters at Mendota (then called St. Peter's), where he lived twenty-eight years; removed to St. Paul in 1862, and resided there through the remainder of his life. He was delegate in Congress, representing Minnesota Territory, 1849 to 1853; was the first governor of the state, 1858 to 1860; and during the Sioux war, in 1862, led in the suppression of the outbreak, and the next year commanded an expedition against these Indians in North Dakota. He was during more than twenty years a regent of the State University; was a charter member of the Minnesota Historical Society; and was its president in 1867, and from 1876 until his death, February 18, 1891.

MAGNITUDE OF THE EARLY FUR TRADE.

This partial list of prominent fur traders within the area of Minnesota during the first half of the last century, and the

earlier representatives of this fur trade with the Indians, considered in preceding chapters, from the coming of the first French explorers onward to Verendrye, Mackenzie, and their associates in the eighteenth century, well exhibit the magnitude gradually attained and long held by this great commercial industry, and its importance in opening the former wilderness to general white immigration, agriculture, the building of towns and cities, and all the development of our present grand commonwealth.

So early as the time of Le Sueur on the Blue Earth river, in 1700-01, only forty-five years after the earliest Europeans came to our upper Mississippi, the country had already numerous wandering and adventurous white traders, bartering weapons and trinkets of civilized manufactures for the prized beaver furs of the Indian hunter.

Two thirds of a century later, in Carver's time, the northern fur trade passing along the route of the Grand Portage had attained the dignity of a great traffic, employing much capital, many men in a well organized business, and fleets of canoes.

After another third of a century, in 1801, Sir Alexander Mackenzie wrote of the operations of the Northwest Fur Company: "In 1788, the gross amount of the adventure for the year did not exceed forty thousand pounds, but by the exertion, enterprise, and industry of the proprietors, it was brought in eleven years to triple that amount and upwards; yielding proportionate profits, and surpassing, in short, any thing known in America."

In the year 1799 the furs and peltries brought to Montreal by this company, mostly coming by the route of our northern boundary and Grand Portage, comprised, as Mackenzie states, 106,000 beaver skins, these being far the most important and valuable part of the whole, and the skins of other animals as follows: of the bear, 2,100; fox, 1,500; kitt fox, 4,000; otter, 4,600; muskrat, 17,000; marten, 32,000; mink, 1,800; lynx, 6,000; wolverine, 600; fisher, 1,650; racoon, 100; wolf, 3,800; elk, 700; deer, 750; dressed deer skins, 1,200; and buffalo robes, 500.

The goods supplied by the company, mostly by importation from Great Britain, to be bartered with the Indians for their furs, Mackenzie enumerated thus:

> The articles necessary for this trade are coarse woolen cloths of different kinds; milled blankets of different sizes; arms and ammunition; twist and carrot tobacco; Manchester goods; linens, and coarse sheetings; thread, lines and twine; common hardware; cutlery and ironmongery of several descriptions; kettles of brass and copper, and sheet-iron; silk and cotton handkerchiefs; hats, shoes and hose; calicoes and printed cottons, &c., &c., &c. Spirituous liquors and provisions are purchased in Canada.

Nearly 1,300 men were employed by this Northwest Company, of whom nearly 400 were engaged in the canoe transportation of supplies from Montreal to Grand Portage and Rainy lake, and in bringing back cargoes of furs. The others were mostly at trading posts throughout the country northwest and west of Lake Superior, to the waters of the Mackenzie and Peace rivers and on the Red river, the Assiniboine, the Saskatchewan, and their tributaries, coming thence in the summer to Rainy lake or Grand Portage with their canoe loads of furs, and returning with goods and provisions. Mackenzie described the men, the lading of the Montreal canoes, and the departure for the upward voyage on the St. Lawrence and Ottawa rivers and the upper Great Lakes, as follows:

> We shall now proceed to consider the number of men employed in the concern: viz. fifty clerks, seventy-one interpreters and clerks, one thousand one hundred and twenty canoe men, and thirty-five guides. Of these, five clerks, eighteen guides, and three hundred and fifty canoe men, were employed for the summer season in going from Montreal to the Grande Portage, in canoes, part of whom proceeded from thence to Rainy Lake. * * * These were hired in Canada or Montreal, and were absent from the 1st of May till the latter end of September. * * * All the others were hired by the year, and some times for three years; and of the clerks many were apprentices, who were generally engaged for five or seven years. * * *
>
> The necessary number of canoes being purchased, at about three hundred livres each, the goods formed into packages, and the lakes and rivers free of ice, which they usually are in the beginning of May, they are then dispatched from La Chine, eight miles above Montreal, with eight or ten men in each canoe, and their baggage; and sixty-five

packages of goods, six hundred weight of biscuit, two hundred weight of pork, three bushels of pease, for the men's provision; two oil cloths to cover the goods, a sail, &c., an axe, a towing-line, a kettle, and a sponge to bail out the water, with a quantity of gum, bark, and watape, to repair the vessel. An European on seeing one of these slender vessels thus laden, heaped up, and sunk with her gunwale within six inches of the water, would think his fate inevitable in such a boat, when he reflected on the nature of her voyage; but the Canadians are so expert that few accidents happen.

Leaving La Chine, they proceed to St. Ann's, within two miles of the Western extremity of the island of Montreal, the lake of the two mountains being in sight, which may be termed the commencement of the Utawas [Ottawa] River. At the rapid of St. Ann they are obliged to take out part, if not the whole of their lading. It is from this spot that the Canadians consider they take their departure, as it possesses the last church on the island, which is dedicated to the tutelar saint of voyagers.

LATER FUR COMPANIES.

The Northwest Company, of which Mackenzie wrote as thus quoted, had been organized in 1783-4, to enter into competition with the time-honored Hudson Bay Company, chartered in 1670, whose field of operations was mainly farther north, about Hudson Bay and westward. But the prosperity of the Northwest Company soon led to the formation, in 1795, of the New Northwest Company, more commonly called the XY Company, which became a formidable rival. Its trading house at Grand Portage was about a half mile distant from that of the Northwest Company; and when the latter removed its headquarters in 1803 to the mouth of the Kaministiquia river, on Thunder bay, the XY Company also erected there its chief trading post of the north shore of Lake Superior. About two years later, in 1804-05, these rival companies formed an amicable union, continuing under the older name as the Northwest Company. The popular name of the temporarily competing XY Company came from their use of these letters to mark their bales of goods or furs, so chosen as the next in alphabetic order after the "N.W." used in the same way by the older company.

The strife and warfare between the Northwest and Hudson Bay companies, involving the attacks against the Selkirk Settlement of the Red River, in 1815 and 1816, need not claim attention here; though these direful troubles, and also the loss of crops by frosts and grasshoppers, and finally the great flood of the Red river in 1826, caused some of the Swiss immigrant farmers of the Selkirk colony to remove in 1827 to the vicinity of Fort Snelling, those being the first agricultural settlers within the area of Minnesota.

Much of the centuries-long rivalries in the fur trade, first between the British and the French, afterward between these two British companies, and latest between competing traders of the United States, has been well told in histories of the Hudson Bay Company, by Beckles Willson, published in 1899; by Prof. George Bryce, in 1900; and by Miss Agnes C. Laut, now in press and expected to be published in the summer of the present year 1908.

In 1808 the American Fur Company was incorporated by an act of the legislature of New York. Its founder, John Jacob Astor, was its president until 1834, being succeeded in the presidency by Ramsay Crooks, for whom Crookston, the largest city of the part of the Red river valley in Minnesota, was named.

After 1822 this great company, absorbing or suppressing many smaller rivals, was conducted in two distinct departments, the Northern and the Western. Its Northern Department embraced the region of the Great Lakes and the upper Mississippi, with Crooks as superintendent and afterward president, residing in New York City, but spending much time at Mackinaw and in other parts of the Northwest. Pierre Chouteau, Jr., of St. Louis, was the principal superintendent of the Western Department, which comprised the Missouri river country and the Rocky mountains.

For the very interesting history of this great fur trading company, especially of its Western Department, the reader should consult H. M. Chittenden's elaborate work in three volumes, published in 1902, entitled "The American Fur Trade of the Far West."

For thorough consideration of the effects of the fur trade upon the Indians, and of its service as the precursor of the white man's occupation of all the land, see "The Character and Influence of the Indian Trade in Wisconsin," by Prof. Frederick J. Turner, forming pages 543-615 in Volume IX (1891) of the Johns Hopkins University Studies in Historical and Political Science. In a less extended form, this study had been previously published in the Proceedings of the Thirty-sixth Annual Meeting of the State Historical Society of Wisconsin, in 1889.

Chapter XIII.

ZEBULON M. PIKE.

THE NORTHWEST TERRITORY.

A LITTLE more than one-third of the area of Minnesota, comprising about 29,000 square miles, on the east side of the Mississippi river and of a line drawn south from "the most northwestern point" of the Lake of the Woods to the Mississippi, belonged to the national domain of the original thirteen United States in accordance with the Treaty of 1783, at the end of the Revolutionary War. The other two-thirds of our state, or about 55,000 square miles, lying west of the Mississippi and of the line mentioned, have been commonly regarded as a part of the Louisiana Purchase, acquired in 1803.

Recent discussions, however, concerning the terms of the treaties of France in 1763, ceding Canada and the country east of the Mississippi river to Great Britain and the part of the Louisiana Territory west of the Mississippi to Spain, seem to warrant a conclusion that the vast tract thus ceded to Spain, which was acquired forty years later by the United States, had as its northern boundary the line of natural watershed dividing the tributaries of the Mississippi and Missouri rivers from the Nelson river basin. Under this view the two parts of Minnesota received respectively in the Northwest Territory and the Louisiana Purchase are nearly equal in area.

According to the Treaty of 1783, the Northwest Territory reached certainly as far west as to the meridian passing through the Northwest Angle of the Lake of the Woods. The further agreement between Great Britain and the United States in 1818, defining our international boundary from that lake to the Rocky

mountains as the forty-ninth parallel, should be understood to have extended our Northwest Territory to include after that date an additional large tract continuing westward beyond the head of the Mississippi and the Lake of the Woods, to where this parallel intersects the natural divide or height of land between the Missouri and Nelson basins. Thus in the year 1818 the United States came into definite and acknowledged possession of the Red river valley, in the present states of Minnesota and North Dakota, of the region about Devil's Lake, of more than half of the Turtle mountain, crossed by the boundary between North Dakota and Manitoba, and of a large part of the Souris or Mouse river basin. As thus extended, the Northwest Territory reached almost to the northwest corner of North Dakota.

But it was not until after the celebration of the centennial anniversary of the Louisiana Purchase, by the World's Fair at St. Louis, that reconsideration of the scope and import of the treaties in 1763, 1783, 1803, and 1818, established this conclusion. During a hundred years the Purchase of Louisiana was supposed to have included the northwest part of Minnesota and all our northern border westward to the Rocky mountains.

THE ORDINANCE OF 1787.

For the government of the Northwest Territory, comprising the broad country west of New York and Pennsylvania to the upper Mississippi, lying between the Ohio river and the Great Lakes, and for its prospective gradual formation into new states of the federal union, the Congress of the United States in 1787 enacted a famous ordinance, the first great legislative act of this new nation.

Samuel M. Davis, in a paper on "The Dual Origin of Minnesota," published in the Minnesota Historical Society Collections (Volume IX, 1901, pages 519-548), wrote: "This ordinance was one of the most important acts ever passed by an American legislative body, for it determined with great wisdom and statesmanship that the new Northwestern states should be free from the taint and curse of negro slavery, and that educa-

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tion should receive just and due attention, asserting thus a principle which later has found expression in its being aided by the grant of a part of the public lands."

Theodore Roosevelt, in the third volume of "The Winning of the West," published in 1894, wrote:

> In truth the ordinance of 1787 was so wide-reaching in its effects, was drawn in accordance with so lofty a morality and such far-seeing statesmanship, and was fraught with such weal for the nation, that it will ever rank among the foremost of American state papers, coming in that little group which includes the Declaration of Independence, the Constitution, Washington's Farewell Address, and Lincoln's Emancipation Proclamation and Second Inaugural. It marked out a definite line of orderly freedom along which the new States were to advance. It laid deep the foundation for that system of widespread public education characteristic of the Republic and so essential to its healthy growth. It provided that complete religious freedom and equality which we now accept as part of the order of nature, but which were then unknown in any important European nation. It guaranteed the civil liberty of all citizens. It provided for an indissoluble Union, a Union which should grow until it could relentlessly crush nullification and secession; for the States founded under it were the creatures of the Nation, and were by the compact declared forever inseparable from it.

The number of states to be made from the Northwest Territory was limited to five, according to this Ordinance, its provisions in this respect being noted by Davis as follows:

> Article V provided for the division of the Territory into States, not less than three nor more than five, and drew their boundary lines, subject to changes that Congress might afterwards make. A population of 60,000 free inhabitants should entitle any one of these states to admission, not "into the Union," a phrase that came in with the Constitution, but "by its delegates into the Congress of the United States, on an equal footing with the original states in all respects whatever," and to "form a permanent constitution and State government," with the proviso that "the constitution so to be formed shall be republican, and in conformity to the principles contained in these articles."

In succession the states of Ohio, Indiana, Illinois, Michigan, and Wisconsin, were formed from this Territory. Transcending the authority granted by the Ordinance of 1787, Congress allowed a remnant west of the St. Croix river and north

and west of Lake Superior to be left after the admission of Wisconsin as the fifth state from the old Northwest Territory; and from that remnant, with a large tract of the old Territory of Louisiana, west of the Mississippi, the North Star State of Minnesota was added to the constellation of our country and our flag.

THE LOUISIANA PURCHASE.

France in 1763, humbled by wars in Europe and America, ceded her chief possessions on this continent to her English and Spanish rivals. Canada and the part of old Louisiana lying east of the Mississippi river, excepting a tract that included New Orleans, passed to the dominion of England, and the part of Louisiana west of this river to Spain. Thus all New France was lost, for which Champlain, Nicolet, Groseilliers and Radisson, Joliet and Marquette, La Salle, Perrot and Le Sueur, Verendrye and his sons, and many other brave pioneers of exploration and civilization, had striven with temporary success. They brought half of the continent to the knowledge of geographers, but its national ownership was relinquished, being transferred through vicissitudes of war partly to the British in Canada, and partly, by treaties in 1783 and 1803, to the United States.

Louisiana, as named by La Salle and Hennepin, in 1682 and 1683, comprised the basin of the Mississippi and its tributaries, with relatively small adjoining areas east and west of the lower Mississippi, directly tributary to the Gulf of Mexico. On the east, Louisiana thus reached to the sources of the Allegheny, Monongahela, Kanawha, Cumberland, and Tennessee rivers, including the west flank of the Appalachian mountain belt; and on the west its boundary was the line of the Rocky mountain watershed dividing the highest springs of the Missouri, Arkansas and Red rivers from those of the Columbia, the Colorado and the Rio Grande.

After France in the Treaty of Paris, February 10, 1763, ceded nearly all her territory east of the Mississippi to Great

Britain and the west side of the Mississippi basin to Spain, the name of Louisiana was restricted mainly to the latter area. It also comprised, however, as a part of the cession to Spain, the island of New Orleans, east of the great river, bounded by the Bayou Manchac, the Amite river, and lakes Maurepas, Pontchartrain, and Borgne, on the north, by the Gulf of Mexico on the east and south, and by the river on the southwest.

Amid the exigencies of European wars in the year 1800, Spain ceded Louisiana back to France under the government of Napoleon; and on April 30, 1803, he negotiated its sale to the United States, for $15,000,000. The territory embraced the same great western side of the Mississippi basin which France had yielded to Spain forty years before; and east of the lower part of the Mississippi it included the New Orleans island and an additional area extending north to the latitude of thirty-one degrees and east to the Perdido river. The tract on the east side of the Mississippi forms the southeastern part of the present state of Louisiana and the extreme southern parts of Mississippi and Alabama.

The entire area of the Louisiana Purchase, reaching from our great river to the western crest line of the continent, and from the Gulf of Mexico northwestward to the forty-ninth parallel, but not including the basins of the Red river of the North and the Mouse river, is about 900,000 square miles. According to the official United States map of 1904, it embraces the whole of Arkansas, Missouri, Iowa, Nebraska, Kansas, Oklahoma, and the Indian Territory; about half of Minnesota and North Dakota; nearly the whole of South Dakota and of Louisiana; relatively small parts of Texas and New Mexico; and large parts of Colorado, Wyoming, and Montana.

Minnesota was the fifth state admitted to the Union wholly or partly from this Purchase.

The reader who would learn more fully the history and diplomacy of this first and greatest acquisition of territory by the United States should consult the several works published on this subject by Hon. Binger Hermann in 1898, Dr. James K. Hosmer and James Q. Howard in 1902, Rufus Blanchard and

Ripley Hitchcock in 1903, and Walter R. Smith in 1904; and also should examine the large wall map of the United States, before mentioned, showing the successive additions to our national domain, published in 1904 by the Department of the Interior.

LIFE AND MILITARY SERVICES OF PIKE.

Two national expeditions were soon organized to explore little known parts of the Louisiana Purchase. The more important and longer of these expeditions, under the leadership of Lewis and Clark, starting from near St. Louis on May 14, 1804, traversed the Upper Missouri region and crossed the Rocky mountains and the Columbia basin to the Pacific ocean; and the shorter expedition, led by Lieutenant (afterward General) Pike, went nearly to the utmost sources of the upper Mississippi.

Every human life is an interesting drama. Grandly so, and truly noble, was the life of Zebulon Montgomery Pike; and it ended with a halo of immortal glory, as a patriot soldier who died for his country.

Pike was born in Lamberton (now a part of Trenton), N. J., January 5, 1779. His father was a captain in the Revolution, and continued in the federal army service. The son, Zebulon Montgomery, was of slender form in his boyhood, of pale and very fair complexion, with a gentle and retiring disposition, but with a resolute spirit. He received only a scanty common school education. At the age of fifteen years he began service as a cadet in his father's regiment, and was promoted when twenty years old to the rank of first lieutenant.

From General James Wilkinson, in command on the Mississippi, Lieutenant Pike received orders in 1805 to conduct an expedition to its upper streams and lakes, for several purposes, as to negotiate treaties with the Indians, to secure a conformity with the laws of the United States by the agents of the Northwest Company and others engaged at the far north in the fur trade, and to extend geographic exploration. Pike started from St. Louis, on this expedition, August 9, 1805, with twenty sol-

diers, in a keel boat seventy feet long, provisioned for four months.

On the 23rd day of September, 1805, on the island at the mouth of the Minnesota river, since called Pike island, he made a formal purchase by treaty, from chiefs of the Dakotas or Sioux, of a large tract reaching from the Minnesota river to the Falls of St. Anthony, and another tract at the mouth of the St. Croix river, these lands passing thus to the ownership of the United States for military purposes.

Proceeding up the Mississippi, Pike and his party were overtaken by early snow and cold, on October 16, and were obliged to winter at Pike rapids, in what is now Morrison county. The site of his stockaded encampment, or fort, has been identified there, on the west shore of the river, by the late Hon. Nathan Richardson, of Little Falls. The party relied largely on the abundant game of the region for their sustenance.

In the winter, setting out December 10, Pike advanced afoot, with a few of his men, to Sandy, Leech, and Cass lakes, attained the objects of his expedition concerning the relations of the fur traders to the United States, and returned to the fort at Pike rapids on the 5th of March. Thence descending the Mississippi, he reached St. Louis on the last day of April, 1806. His very interesting journal gives our earliest detailed description of the upper Mississippi region above the mouth of Elk river, with many names of lakes and streams, and a definite view of the conditions then prevailing at the fur-trading posts.

After a few weeks Pike was again despatched by General Wilkinson, to treat with the Indian tribes and explore the country west and southwest of St. Louis, to the headquarters of the Arkansas and Red rivers. In this second expedition, on December 3, 1806, he measured the altitude of the very conspicuous mountain in central Colorado which has been since called Pike's Peak. Proceeding southward and unintentionally entering Spanish territory, Pike and his small command encountered Spanish troops, and he was summoned before the governor of Santa Fe, but, after considerable delay, was permitted to return into the United States.

The journals of these expeditions were published by Pike in 1810; in the following year an English edition from his manuscripts was issued in London; and in the years 1812 and 1813 French and Dutch editions were published. In 1889 the English edition was reprinted at Denver; and in 1895 an annotated reprint from the original of 1810, with a memoir of Pike, was published by Dr. Elliott Coues, who was aided in geographic notes for Minnesota by the late Alfred J. Hill, of the Minnesota Historical Society.

Besides reproducing Pike's maps, Dr. Coues added a very elaborate "Historico-Geographic Chart of the Upper Mississippi River," which gives lists of the names applied by successive maps and authors to each of the many streams and lakes above the Falls of St. Anthony.

During the second war with Great Britain, Pike received rapid promotion, and on March 12, 1813, was commissioned as brigadier general. In the attack on York (now Toronto), Canada, he was killed April 27, 1813, with many others, both of the United States and British troops, by the explosion of a British magazine.

No other explorer of Minnesota more deserves recognition and honor. It may well be hoped that his name shall be given to some county yet to be formed adjoining or including Leech lake or Cass lake.

Pike died, like General Wolfe before Quebec, just when his troops had won an important battle. As Coues wrote: "Each led to the assault; each conquered; each fell in the arms of victory; each is said to have pillowed his head on the stricken colors of the defenders."

The circumstances of General Pike's death enshrined him as a hero and martyr in the hearts of all his countrymen. Coues thus describes his last hours:

> The dying general was carried to a boat at the lake side and conveyed to the Pert, whence he was taken aboard the flagship Madison. Some recorded words of his last moments need not be scanned with critical eye. When those who bore their fallen leader reached the boat, the huzza of the troops fell upon his ears. "What does it mean?" he feebly asked. "Victory!" was the reply; "the Union Jack is coming

down, General,—the Stars and Stripes are going up." The dying hero's face lighted up with a smile of ecstasy. His spirit lingered a few hours. Before the end came, the British flag was brought to him. He made a sign to place it under his head; and thus he expired.

His life was crowned with a happy and glorious death, the patriot's supreme test and reward. Sweet and beautiful it is to die for the fatherland.

NOTES OF PIKE'S JOURNAL IN MINNESOTA.

From the rare book narrating Pike's expeditions, the first volume of the Minnesota Historical Society Collections republished large parts of his journal written on the upper Mississippi and in his journey from his winter quarters to the more northern fur trading posts. With the additions of numerous biographic and geographic notes by the editor, J. Fletcher Williams, secretary of the Society, this reprint gives very vividly and elaborately a general view of the condition of the Sioux and Ojibways, of the fur trade, and of the wild fauna, at the time of this first government expedition in Minnesota.

Many interesting parts of the journal, however, were omitted from this reprint; and the reader may better peruse the full narrative as published by Coues, with his very extensive notes and comments.

Pike and his party arrived at the Wisconsin river and Prairie du Chien, in their ascent of the Mississippi, on September 4, 1805, and went forward on the 8th, in two bateaux. They were accompanied by two interpreters, Pierre Rousseau for all the expedition, and Joseph Renville, to go as far as the Falls of St. Anthony.

On September 12 they passed the Racine or Root river and the site of La Crosse, so named from the game of ball frequently played by the Sioux on its beautiful prairie. The next day they passed the Black river, and encamped on or near the site of Trempealeau.

September 14, coming to the prairie since occupied by the city of Winona, Pike and three others of his party disembarked, went to the top of the valley bluffs, about 600 feet above the

river, and enjoyed the outlook, which Pike described as follows:

> We crossed first a dry flat prairie; when we arrived at the hills we ascended them, from which we had a most sublime and beautiful prospect. On the right, we saw the mountains [bluffs] which we passed in the morning and the prairie in their rear; like distant clouds, the mountains at the Prairie Le Cross; on our left and under our feet, the valley between the two barren hills through which the Mississippi wound itself by numerous channels, forming many beautiful islands, as far as the eye could embrace the scene; and our four boats under full sail, their flags streaming before the wind. It was altogether a prospect so variegated and romantic that a man may scarcely expect to enjoy such a one but twice or thrice in the course of his life.

On September 15 the expedition passed the Zumbro river, and camped opposite the site of Alma, Wisconsin; and on the 16th the Chippewa river was passed, Lake Pepin was entered, and in the evening a run with sails was made to a landing for shelter from the increasing gale at or near the site of Stockholm, Wisconsin.

On the 18th Pike voyaged out of this lake, and came to the mouth of Canoe (now called Cannon) river, close above the site of the city of Red Wing. Of the Sioux chief met at this place Pike wrote: "There was a small band of Sioux under the command of Red Wing, the second war chief in the nation. He made me a speech and presented a pipe, pouch, and buffalo skin. He appeared to be a man of sense, and promised to accompany me to St. Peters [the Minnesota river]; he saluted me, and had it returned. I made him a small present."

Pike and his boatmen embarked early the next morning, and took dinner at the mouth of the St. Croix river. On the evening of the 20th, they "encamped on a prairie on the east side, on which is a large painted stone [Red Rock], about eight miles below the Sioux village."

The journal for September 21 reads thus, telling of the canoe voyage past the site of St. Paul:

> 21st Sept. Saturday.—Embarked at a seasonable hour, breakfasted at the Sioux village, on the east side. It consists of eleven lodges, and is situated at the head of an island just below a ledge of rocks [Dayton bluff, in the east edge of the city of St. Paul]. The village was eva-

cuated at this time, all the Indians having gone out to the lands to gather fols avoin [wild rice]. About two miles above [opposite the center of the present city], saw three bears swimming over the river, but at too great a distance for us to have killed them; they made the shore before I could come up with them. Passed a camp of Sioux, of four lodges, in which I saw only one man, whose name was Black Soldier. The garrulity of the women astonished me, for at the other camps they never opened their lips; but here they flocked round us with all their tongues going at the same time; the cause of this freedom must have been the absence of their lords and masters. Passed the encampment of Mr. Ferrebault [Jean B. Faribault], who had broken his peroque and had encamped on the west side of the river, about three miles below St. Peters. We made our encampment on the N.E. point of the big island, opposite to St. Peters.

On the afternoon of Sunday the Sioux chief named Petit Corbeau (as translated into French, meaning Little Crow) came with a hundred and fifty warriors, and preliminary arrangements were made for a very important council to be held the next day. This treaty council appears to have been held at Pike's camp on the upper end of the long and low Pike island, immediately beneath the bluff, about 100 feet high, on which Fort Snelling was afterward built. The journal describing the council and treaty reads thus:

23d Sept. Monday—Prepared for the council, which we commenced about twelve o'clock. I had a bower or shade, made of my sails, on the beach, into which only my gentlemen (the traders) and the chiefs entered. I then addressed them in a speech, which, though long, and touching on many points, its principal object was, the granting of land at this place, falls of St. Anthony, and St. Croix [river], and making peace with the Chipeways. I was replied to by Le Fils de Pinchow [Son of the Fearless Chief], Le Petit Corbeau [Little Crow, grandfather of the noted chief of this name in the Outbreak of 1862], and l'Original Leve [Rising Moose]. They gave me the land required, about 100,000 acres (equal to 200,000 dollars), and promised me a safe passport, for myself and any chiefs [Ojibways] I might bring down, but spoke doubtfully with respect to the peace. I gave them presents to the amount of about 200 dollars, and as soon as the council was over, I allowed the traders to present them with some liquor, which, with what I myself gave, was equal to 60 gallons. In one half hour they were all embarked for their respective villages.

The text of this treaty with its signatures, given by Pike in an appendix of his book published in 1810 ("An Account of Expeditions to the Sources of the Mississippi, and through the Western Parts of Louisiana," etc.), is as follows:

Whereas, at a conference held between the United States of America and the Sioux nation of Indians: lieutenant Z. M. Pike, of the army of the United States, and the chiefs and the warriors of said tribe, have agreed to the following articles, which when ratified and approved of by the proper authority, shall be binding on both parties.

Art. 1. That the Sioux nation grant unto the United States, for the purpose of establishment of military posts, nine miles square at the mouth of the St. Croix, also from below the confluence of the Mississippi and St. Peters up the Mississippi to include the falls of St. Anthony, extending nine miles on each side of the river, that the Sioux nation grants to the United States the full sovereignty and power over said district forever.

Art. 2. That, in consideration of the above grants, the United States shall pay (filled up by the senate with 2,000 dollars).

Art. 3. The United States promise, on their part, to permit the Sioux to pass and repass, hunt, or make other use of the said districts as they have formerly done, without any other exception than those specified in article first.

In testimony whereof we, the undersigned, have hereunto set our hands and seals, at the mouth of the river St. Peters, on the 23d day of September, 1805.

Z. M. Pike, 1st lieut. and agent at the above conference. (L. S.)
Le Petit Corbeau, his x mark (L. S.)
Way Ago Enagee, his x mark (L. S.)

The expedition moved forward on September 25, and portaged past the Falls of St. Anthony on the 28th and 29th. Pike surveyed the falls and portage on the 30th, and embarked above the falls on the first day of October.

For the next four miles the river was sufficiently deep, but in its farther ascent frequent shoals and rapids were encountered, causing the men to wade in the cold water while drawing and pushing their lightened boats. October 3 a badger was killed, the first ever seen by Pike; and on the next day, in which the Crow river was passed, a pocket gopher was caught, also an addition to the previously known fauna. Two droves of elk were seen on October 6, between the sites of Monticello and Clearwater.

On the 11th the difficult Grand [Sauk] rapids were passed, and on the next day the Watab rapids, narrowly inclosed by rock outcrops.

Extracts from the journal, telling of the establishment of the winter quarters of the expedition, on the west bank of the river at Pike rapids, about four miles south of Little Falls, are as follows:

15th October, Tuesday.—Ripples all day. In the morning the large boat came up, and I once more got my party together; they had been detained by taking in the game. Yesterday and this day passed some skirts of good land, well timbered, swamps of hemlock and white pine. Water very hard. The river became shallow and full of islands. We encamped on a beautiful point, on the west, below a fall of the river over a bed of rocks, through which we had two narrow shoots to make our way the next day. Killed two deer, five ducks, and two geese. This day's march made me think seriously of our wintering-ground and leaving our large boats. Distance five miles.

16th October, Wednesday.—When we arose in the morning found that snow had fallen during the night; the ground was covered and it continued to snow. This indeed was but poor encouragement for attacking the rapids, in which we were certain to wade to our necks. I was determined, however, if possible, to make la riviere de Corbeau [now Crow Wing river], the highest point ever made by traders in their bark canoes. We embarked, and after four hours work became so benumbed with cold that our limbs were perfectly useless. We put to shore on the opposite side of the river, about two-thirds of the way up the rapids. Built a large fire; and then discovered that our boats were nearly half full of water, both having sprung large leaks so as to oblige me to keep three hands bailing. My sergeant (Kennerman), one of the stoutest men I ever knew, broke a blood-vessel and vomited nearly two quarts of blood. * * * These unhappy circumstances, in addition to the inability of four other men, whom we were obliged to leave on shore, convinced me that, if I had no regard for my own health and constitution, I should have some for those poor fellows, who were killing themselves to obey my orders. After we had breakfasted and refreshed ourselves, we went down to our boats on the rocks, where I was obliged to leave them. I then informed my men that we would return to the camp and leave some of the party and our large boats. This information was pleasing, and the attempt to reach the camp soon accomplished. My reasons for this step have partly been already stated. The necessity of unloading and refitting my boats, the beauty and convenience of the spot for building huts, the fine pine trees for peroques, and the quantity of game, were additional induce-

ments. We immediately unloaded our boats and secured their cargoes. In the evening I went out upon a small but beautiful creek [now Swan river], which empties into the falls, for the purpose of selecting pine trees to make canoes. Saw five deer, and killed one buck weighing 137 pounds. By my leaving men at this place, and from the great quantities of game in its vicinity, I was ensured plenty of provision for my return voyage. In the party left behind was one hunter, to be continually employed, who would keep our stock of salt provisions good. * * *

17th October, Thursday.—It continued to snow. I walked out in the morning and killed four bears, and my hunter three deers. Felled our trees for canoes and commenced working on them.

18th October, Friday.—Stopped hunting and put every hand to work. Cut 60 logs for huts and worked at the canoes. This, consisidering we had only two falling-axes and three hatchets, was pretty good work. Cloudy, with little snow.

19th October, Saturday.—Raised one of our houses, and almost completed one canoe. I was employed the principal part of this day in writing letters and making arrangements which I deemed necessary, in case I should never return.

20th October, Sunday.—Continued our labor at the houses and canoes, finished my letters, &c. At night discovered the prairie, on the opposite side of the river, to be on fire; supposed to have been made by the Sauteurs [Ojibways]. I wished much to have our situation respectable here, or I would have sent the next day, to discover them.

* * * * * * * * * * * * * * * * *

31st October, Thursday.—Enclosed my little work completely with pickets. Hauled up my two boats, and turned them over on each side of the gate-ways; by which means a defence was made to the river, and had it not been for various political reasons, I would have laughed at the attack of 800 or 1,000 savages, if all my party were within. For except accidents, it would only have afforded amusement, the Indians having no idea of taking a place by storm. * * *

The foundering of one of Pike's pine log canoes, within an hour after it was launched, caused his personal baggage and his principal stores of ammunition to be soaked, many of the cartridges being spoiled.

November was spent mostly in various hunting trips. On the third day of December a trader named Robert Dickson came to Pike's fort, as it is called in the journal. His trading post was on the Mississippi below the site of St. Cloud, but he also

had a branch post at Sandy lake and furnished to Pike a letter of introduction to his agent there.

December 10 Pike started on his journey to the northern lakes and trading posts, accompanied by several of his men, with sleds drawn by them and a log canoe called a peroque. They reached Crow Wing river on the 21st, and passed the site of Brainerd on the 27th, finding the river above there mainly closed by ice. The mouth of Pine river was passed on the last day of the year.

On the third day of January, 1806, Pike visited a trading post of an Englishman named Grant, on the lower Red Cedar lake, now simply called Cedar lake, lying about two miles south of the Mississippi and three miles southwest of the present town of Aitkin. "When we came in sight of his house," wrote Pike, "I observed the flag of Great Britain flying. I felt indignant, and cannot say what my feelings would have excited me to, had he not informed me that it belonged to the Indians. This was not much more agreeable to me."

Five days later, Pike reached the trading post of the Northwest Company at Sandy lake, also under the direction of Mr. Grant, by whom he and his men, the latter arriving there on the 13th, were receiving with much hospitality.

On the 20th of January, Pike and his men, with their sleds, left Sandy lake on their journey forward up the Mississippi, partly by the way of the Willow river; on the 29th they reached Pokegama falls; and on the first day of February they reached and crossed Leech Lake, considered to be "the main source of the Mississippi," and came to the trading post of the Northwest Company, the headquarters of the company for this upper Mississippi region, on a western point of the very irregular shore line.

After eleven days spent at Leech lake, Pike and one of his men, accompanied by Hugh M'Gillis, who was the general agent for the Northwest Company, and two of his employees, went forward on February 12, by a land march reckoned as thirty miles, to the trading post on the upper Red Cedar lake (now Cass lake). They were very hospitably received by the Canadian trader in charge of that post, named Roy, and his Ojibway wife.

From this farthest limit of the expedition, Pike returned on the 14th of February to the main post of the Northwest Company on Leech lake. Many Ojibways had gathered there, and the journal says, "The chiefs asked my permission to dance the calumet dance, which I granted."

On February 7, during the preceding stay at the Leech Lake post, Pike had addressed an official letter to Hugh M'Gillis, "Proprietor and agent of the N. W. company," enjoining upon him, first, that the future supplies of goods for the company's use should be entered for payment of duties at the United States custom house at Mackinaw; second, that the English flag should not be hoisted at any trading post, but to use only the United States flag; third, that the traders should present no flag nor medal to an Indian, nor hold councils with them on political subjects, but should refer them, on such matters, to officers of the United States; and, further, that the officers of the company should furnish themselves with the United States laws regulating commerce with the Indians, including restriction of trade in liquor, etc., and should conform to those requirements.

In return, under date of February 15, M'Gillis communicated to Pike, by an official letter, his cordial acceptance of the regulations so imposed on the Northwest Company.

The ensuing council and deliberations with the Ojibways are narrated thus:

15th February, Saturday.—The Flat Mouth, chief of the Leech Lake village, and many other Indians arrived. Received a letter from Mr. M'Gillis. Noted down the heads of my speech, and had it translated into French, in order that the interpreter should be perfectly master of his subject.

16th February, Sunday.—Held a council with the chiefs and warriors of this place, and of Red Lake; but it required much patience, coolness, and management to obtain the objects I desired, viz: That they should make peace with the Sioux; deliver up their [British] medals and flags; and that some of their chiefs should follow me to St. Louis. As a proof of their agreeing to the peace, I directed that they should smoke out of the [Sioux chief] Wabasha's pipe, which lay on the table; they all smoked, from the head chief to the youngest soldier; they generally delivered up their flags with good grace; except the Flat Mouth, who said he had left both at his camp, three days march, and promised to deliver them up to Mr. M'Gillis, to be forwarded.

With respect to their returning with me, the old Sweet [a chief from Red lake] thought it most proper to return to the Indians of the Red lake, Red river, and Rainy Lake river. The Flat Mouth said it was necessary for him to restrain his young warriors, &c. The other chiefs did not think themselves of consequence sufficient to offer any reason for not following me to St. Louis, a journey of between two and three thousand miles through hostile tribes of Indians. I then told them "that I was sorry to find that the hearts of the Sauteurs of this quarter were so weak that the other nations would say, 'What! are there no soldiers at Leech, Red, and Rainy Lakes, who had the hearts to carry the calumet of their chief to their father?' " This had the desired effect. The Bucks and Beaux, two of the most celebrated young warriors, rose and offered themselves to me for the embassy; they were accepted, adopted as my children, and I installed their father. Their example animated the others, and it would have been no difficult matter to have taken a company; two however were sufficient. I determined that it should be my care never to make them regret the noble confidence placed in me; for I would have protected their lives with my own. The Beaux is brother to the Flat Mouth. Gave my new soldiers a dance and a small dram. They attempted to get more liquor, but a firm and peremptory denial convinced them I was not to be trifled with.

17th February, Monday.—The chief of the land [a personal name, one of the Leech Lake chiefs] brought in his flag, and delivered it up. Made arrangements to march my party the next day.

The returning route was southward to Whitefish lake, and thence southeastward, crossing the Mississippi, to the trading post before visited on Cedar lake, where Pike arrived in the forenoon of February 25 and remained three days. Traveling thence down the Mississippi, he arrived on the 5th of March at his post or fort at Pike rapids, having been absent nearly three months in the northward journey, councils with the traders and Indians, and the return. The expedition had supplemented the Treaty of 1783 and the Louisiana Purchase. It was the first concrete and tangible bond uniting this area to the national domain.

More than a month following, until the river should be open for the downward voyage, was spent by Pike and his men in hunting and in parleys with the Ojibway and Menomonee Indians, the latter having numerous lodges within a few hours' travel from the Pike rapids.

On April 2 the ice began to move on the Mississippi at Pike's fort, and four days later the river below was open. "In the evening," says the journal of April 6, "the men cleared out

their room and danced to the violin, and sang songs until 11 o'clock. So rejoiced was every heart at leaving this savage wilderness." April 7 the expedition embarked for the return to St. Louis.

The mouth of Rum river and several Menomonee lodges on the Mississippi a few miles below were passed early in the morning of April 10, and the afternoon was spent in portaging past the Falls of St. Anthony. The next day the expedition reached Pike island, at the mouth of the Minnesota river, and again camped there.

On or near the contiguous site of Fort Snelling, a large company of the neighboring Sioux tribes had assembled, awaiting Pike's arrival. Of the council held that evening in the encampment of the Sioux chiefs and warriors, Pike wrote:

> There were about 100 lodges or 600 people; we were saluted on our crossing the river with ball as usual. The council house was two large lodges, capable of containing 300 men. In the upper were 40 chiefs, and as many pipes, set against the poles; along side of which I had the Sauteurs' pipes arranged. I then informed them in short detail, of my transactions with the Sauteurs [Ojibways]; but my interpreters were not capable of making themselves understood. * * * The interpreters however informed them that I wanted some of their principal chiefs to go to St. Louis; and that those who thought proper might descend to the prairie [Prairie du Chien] where we would give them more explicit information. They all smoked out of the Sauteurs' pipes, excepting three, who were painted black, and were some of those who lost their relations last winter [killed by Ojibways]. * * *

On April 12 the expedition embarked early; passed the site of St. Paul, and searched in vain for Carver's cave; and, on arriving at the mouth of the St. Croix, Pike held a conference with Little Crow and warriors of his band who were awaiting him.

The next day Pike reached the site of Red Wing at two in the afternoon, and there held a council with the chief of this name and his band. Because ice still partly covered Lake Pepin, he remained a day at Red Wing's village, ascended the adjacent Barn bluff, and saw the grand view from the top.

April 15 Pike and his party passed through Lake Pepin, and three days later reached Prairie du Chien. There they were greeted by crowds on the river bank, and "received a great deal of news from the States and Europe, both civil and military."

Chapter XIV.

CASS AND SCHOOLCRAFT.

THE WAR OF 1812.

WHEN war was again declared between this new nation and the parent country in 1812, the British and Canadian traders who were agents of the Northwest Company in the Northwest Territory and the northern part of the Louisiana Purchase allied themselves mostly with Great Britain. Incited by the traders, many of the Northwestern Indians joined them in hostilities against the United States. Wabasha and Little Crow, among the Minnesota Sioux, were in this number.

On July 17, 1812, the United States garrison at Mackinaw was surrendered to an overwhelming force of British regulars, Canadian traders and voyageurs, and Sioux, Ojibway, Winnebago, and Menomonee Indians. Robert Dickson, a prominent trader on the upper Mississippi in the time of Pike's expedition, was one of the chief leaders of the Indians; and Joseph Rolette, whose son of the same name achieved renown in Minnesota history in 1857, was an officer of the French Canadian allies.

Two years later, Fort Shelby at Prairie du Chien, recently built for defense of the upper Mississippi region, was captured by a British expedition from Mackinaw, guided by Joseph Rolette. Of the British force making this attack, Dr. Neill wrote in his History of Minnesota: "The captain was an old trader by the name of McKay, and under him was a sergeant of artillery, with a brass six-pounder, and three or four volunteer companies of Canadian voyageurs, commanded by traders and officered by their clerks, all dressed in red coats, with a number of Indians." The name of this fort, after the surrender, was changed to Fort McKay by the British.

In Volume IX of the Wisconsin Historical Society Collections, a list of sixty-seven Canadian voyageurs is given (on page 262), who volunteered their services at Mackinaw, June 21, 1814, for this British expedition against Prairie du Chien, among whom are Joseph Rolette, Louis Provencalle, J. B. Faribault, and others well known afterward as traders in Minnesota; and Lieutenant Joseph Renville is in the list of officers of the "Indian Department" at Fort McKay on August 24, 1814, five weeks after its capture.

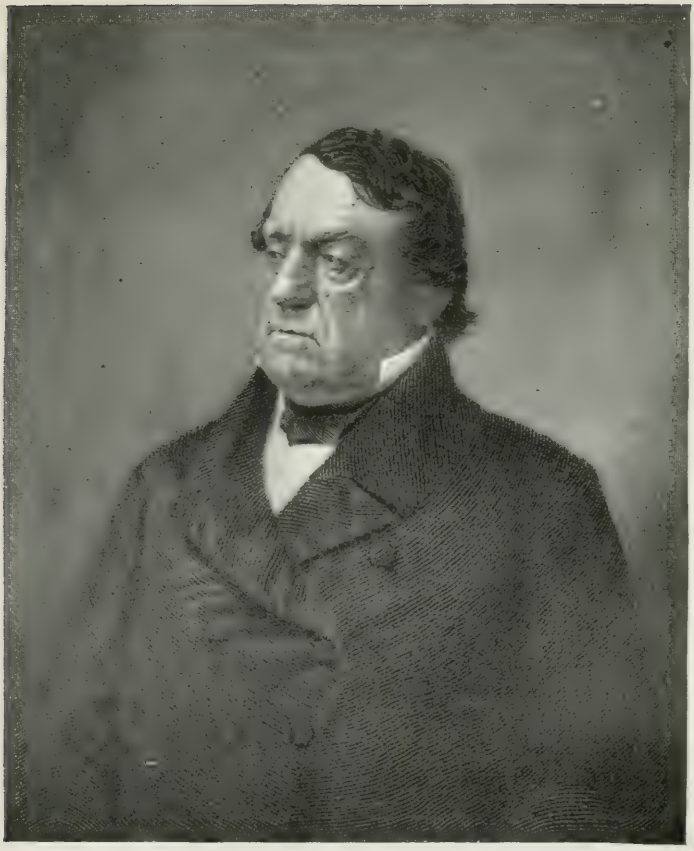
Peace was restored between Great Britain and the United States by the Treaty of Ghent, December 24, 1814.

Relations of peace and friendship between the Indian tribes of the Northwest and the United States were formally established again, with pardon for their participation in the war, by a series of treaties, each tribe or large division of the Indians being treated with separately, in July and September, 1815, at Portage des Sioux, between the Mississippi and Missouri rivers about ten miles above their confluence. Delegations of chiefs and warriors from the Sioux of the Lakes (formerly living at Mille Lacs until driven southward by the Ojibways), the Sioux of the St. Peter's or Minnesota river, and the Yanktons, made respectively three treaties there on July 19, placing these Minnesota divisions of the Dakota nation "in all things, and in every respect, on the same footing upon which they stood before the late war."

On the part of the United States, these treaties were made by William Clark, of the Lewis and Clark expedition, at this time governor of Missouri Territory, which comprised the northern and greater part of the Louisiana Purchase; Ninian Edwards, governor of Illinois Territory, which was the greater western part of the former Northwest Territory; and Auguste Chouteau, the foremost among the founders of the city of St. Louis.

GENERAL LEWIS CASS.

In 1820 two very remarkable men made an expedition, with others in their party, from Detroit, Michigan, by the way of



Lewis Cass

Lake Superior, to the upper Mississippi river, which they ascended from Sandy lake to Cass lake, then called Red Cedar lake. Thence they descended this river to Prairie du Chien, crossed to Lake Michigan by the route of the Wisconsin and Fox rivers, and returned to Detroit. Cass is commemorated by the name of the lake on the Mississippi which was the limit of the expedition. His name is also borne by a county which extends from Cass, Winnebagoshish, and Leech lakes, south to the mouth of the Crow Wing river. Schoolcraft's name is given to an island in Lake Itasca, which he reached by a second expedition, in the year 1832.

Lewis Cass was born in Exeter, N. H., October 9, 1782, and died in Detroit, Mich., June 17, 1866. At the age of eighteen years he came to Marietta, the first town founded in southern Ohio, and studied law there; was admitted to the bar in 1803, and began practice at Zanesville, Ohio; and was colonel and later brigadier general in the war of 1812. He was governor of Michigan Territory, 1813-1831; secretary of war, in the cabinet of President Jackson, 1831-36, including the time of the Black Hawk war; minister to France, 1836-42; United States senator, 1845-48; Democratic candidate for the presidency in the campaign of 1848; again United States senator, 1849-57; and secretary of state, in the cabinet of President Buchanan, 1857-60.

Appletons' Cyclopaedia of American Biography says: "General Cass was a man of great natural abilities, a prudent, cautious legislator, a scholar of fine attainments, of the purest integrity, temperate in all his habits, and personally popular throughout the country."

HENRY ROWE SCHOOLCRAFT.

The historian of the expedition of 1820, under the leadership of Cass, was Henry Rowe Schoolcraft, who was born in Albany county, N. Y., March 28, 1793, and died in Washington, D. C., December 10, 1864. He was educated at Middlebury college, Vt., and Union college, Schenectady, N. Y., giving principal attention to chemistry and mineralogy. In 1817-18 he

traveled in Missouri and Arkansas; in 1820 was the mineralogist of this expedition; in 1822 was appointed the Indian agent for the tribes in the region of the Great Lakes, with headquarters at the Sault Ste. Marie, and afterward at Mackinaw; and in 1832 he led a government expedition to the head of the Mississippi in Lake Itasca, to which he gave this name.

During later years, Schoolcraft held various official positions connected with Indian affairs; and in 1851-57, under the auspices of the United States government, he published a most elaborate work in six quarto volumes, finely illustrated, entitled "Historical and Statistical Information respecting the History, Condition, and Prospects of the Indian Tribes of the United States." He was the author of about thirty other books, including narrations of travels, geologic observations, ethnologic researches, collections of legends, and poems, mostly relating to the Indians.

EXPEDITION TO CASS LAKE, 1820.

Although the Mississippi had probably been seen and charted by Vespucci at its mouths in 1498, during a voyage under the commandership of Pinzon and Solis, probably again by Pineda in 1519, coming into the great river by the way of lakes Borgne, Pontchartrain, and Maurepas, the Amite river, and the Bayou Manchac, and later had been seen in 1528 by Narvaez at the mouths of the delta, and in 1541 to 1543 by the ill-fated expedition of De Soto and Moscoso, more than a hundred years afterward elapsed before this river was again seen by Europeans, its next explorers being Groseilliers and Radisson in 1655. Another century and a half passed before an important part of its headwaters was first explored and mapped by Pike, who still left, however, the main head stream and source unknown to geographers.

To voyage along the upper river and to describe and map its principal source were motives for the expedition undertaken in 1820 by Cass. On leaving Detroit, May 26, he was accompanied by Schoolcraft, mineralogist and historian; Dr. Alex-

Henry R. Schoolcraft

ander Wolcott, Indian agent at Chicago, physician of the expedition; Captain David B. Douglass, civil and military engineer; Lieut. AEneas Mackay, commanding the soldiers; James D. Doty, secretary to the expedition; Major Robert A. Forsyth, private secretary to Governor Cass; Charles C. Trowbridge, assistant topographer; Alexander R. Chace; ten Canadian voyageurs; seven United States soldiers; ten Indians of the Ottawa and Shawnee tribes; and an interpreter and a guide. These thirty-eight men embarked in three canoes, taking provisions only for the voyage to Mackinaw, the place of principal outfitting of the expedition. The departure from Mackinaw, with an additional canoe and the provisions for the long journey, was on June 13, and the Sault Ste. Marie was reached the next day.

Nineteen days, from June 17 to July 5, inclusive, were spent in the voyage along the south shore of Lake Superior to the mouth of the St. Louis river at the west end of the lake. For the farther journey, the large canoes were left behind, and the expedition advanced on July 6 from the Fond du Lac post of the American Fur Company with seven small canoes, passing the long portages of the St. Louis river. On July 10 the party was divided. Governor Cass continued with the canoes up the St. Louis and East Savanna rivers, and down the West Savanna river, to Sandy lake; while Schoolcraft, Lieutenant Mackay with eight soldiers, Doty, and others, went overland to Sandy lake and the trading post of the American Fur Company, on its north side, which they reached on July 13. The canoe party arrived there two days later. A council was held on July 16 with the Ojibways of Sandy lake, who agreed to send a delegation of their old men to the Falls of St. Anthony with Cass upon his return from the upward journey, for a treaty of peace with the Sioux.

Leaving a part of the men, canoes, and baggage of the expedition at Sandy lake, Cass, Schoolcraft, Captain Douglass, and others, pushed forward on July 17, and reached Pokegama falls in two days. On July 20 they entered Lake Winnebagoshish, then called Lake Winnipec; and on the next day came to Red Cedar lake, which Schoolcraft named Cassina lake, in

honor of Governor Cass, a name afterward shortened to Cass lake.

While calling Red Cedar or Cass lake "the source of the Mississippi," Schoolcraft also described the head stream of this river beyond Cass lake and its origin in Lac La Biche or Elk lake, which later was named Lake Itasca. In his "Narrative Journal" of this expedition, published in 1821, he said:

> This lake is supplied by two inlets called Turtle and La Beesh rivers, both tributary on the northwestern margin. * * * La Beesh river is the outlet of Lake La Beesh, which lies six days journey, with a canoe, west-northwest of Cassina Lake, and has no inlets. A short distance from its shores, the waters run north into the Red River of Hudson's Bay. Its outlet has several rapids, and expands into a number of intermediate lakes, the largest of which are lakes Traverse [Bemidji], Oganga, and Kishahoo. It also receives several tributaries, all of which originate in small lakes. It is only capable of being ascended in canoes during the spring and autumnal freshets, and then there are several portages. This branch is considered the largest inlet, and preserves, in the language of the voyageurs, the name of the Mississippi.

Early in the morning of July 22 the party started on their return, and arrived at Sandy lake at two o'clock in the afternoon of the 24th. The next day the expedition embarked at noon with three canoes and a barge for the descent to the Falls of St. Anthony and the newly established fort or cantonment at the mouth of the Minnesota river, accompanied by Ojibway envoys of peace, in another canoe, to meet the Sioux there. The block house of Pike's winter quarters was passed on July 28, and the Sauk Rapids the next day; and one day later they reached the garrison of Colonel Leavenworth, near the site of Fort Snelling. On the first day of August, a treaty of peace was concluded between the Sioux and Ojibways, in the presence of General Cass, Colonel Leavenworth, and other army officers. From the extensive cultivated lands of the garrison, the members of the expedition were regaled with "green corn, pease, beans, cucumbers, beets, radishes, lettuce, etc."

In proceeding down the Mississippi on August 2, a halt was made for examination of Carver's cave, in the east part of

the present city of St. Paul, and again four miles farther on, at Little Crow's village, which consisted of twelve lodges or cabins, built of logs, with about two hundred people, having adjacent cultivated fields of corn, cucumbers, and pumpkins. A long speech was addressed to Governor Cass by Little Crow, who "spoke with deliberation, and without that wild gesticulation which is common among savages;" and the women presented many basketfuls of green corn, of which the voyageurs accepted as much as they could store in their canoes. A ceremonial feast of the Sioux, in recognition of the season of first ripening corn, was in progress in a large cabin with closed doors; but Cass and Schoolcraft were admitted and saw two large boiling kettles of the green corn, cut from the cob, with the Indians seated around them, "singing a doleful song in the savage manner, accompanied by the Indian drum and gourd-rattle."

The next day they passed the mouth of the St. Croix, and at noon arrived at the village of Talangamane [for Tatankamani, his Dakota name, meaning Walking Buffalo], or the Red Wing, consisting of four large lodges and several others smaller, built of logs like those of Little Crow. Of this chief, Red Wing, and his band, Schoolcraft wrote:

> Talangamane is now considered the first chief of his nation, which honour it is said he enjoys both on account of his superior age and sagacity. He appears to be about sixty, and bears all the marks of that age. Very few of his people were at home, being engaged in hunting or fishing. We observed several fine corn fields near the village, but they subsist chiefly by taking sturgeon in the neighboring lake, and by hunting the deer. The buffalo is also occasionally killed, but they are obliged to go two days journey west of the Mississippi, before this animal is found in plenty.

In the afternoon the voyage down the river was continued, entering Lake Pepin, and encamping on its eastern shore, opposite to the site of Lake City.

On the following day, August 4, the expedition made a short halt in the afternoon at the village of the Sioux chief Wabasha, on or near the site of Winona, and encamped on the Minnesota shore about five miles south of Trempealeau, having voyaged twelve hours and descended the river an estimated dis-

tance of seventy miles. Thence one day more, August 5, brought them to Prairie du Chien, by rowing with the current ninety miles, as was estimated, starting about three o'clock in the morning, and reaching the Prairie at six in the afternoon.

The farther course, beyond the limit of Minnesota, need not be traced here. On September 23, having cruised around the shore of Lake Michigan, Schoolcraft and Captain Douglass reached Detroit with the canoes, after an absence of more than three months, being preceded by Governor Cass and others of the party, who had completed their journey by land, riding on horseback from Chicago.

EXPEDITION TO LAKE ITASCA, 1832.

Twelve years after the expedition thus summarized, Schoolcraft conducted a second exploring party to the upper Mississippi, this time reaching its source in the lake called by the French voyageurs Lac La Biche, in translation of its Ojibway name, which in English is Elk lake.

The party organized for this expedition, under orders of the War Department, of which Cass was then secretary, comprised, besides Schoolcraft, Dr. Douglass Houghton, who afterward was the state geologist of Michigan; Lieutenant James Allen, of the United States army, with ten soldiers; Rev. William T. Boutwell, a Presbyterian missionary; George Johnston, interpreter; and twenty Canadian voyageurs.

They embarked from the Sault Ste. Marie on June 7, 1832; and reached the Fond du Lac post of the American Fur Company on Saturday, June 23. There an Ojibway named Ozawindib, or Yellow Head, whose home was at Cass lake, was engaged to accompany them and to act as a guide beyond Cass lake, which was reached on July 10, the route thus far being the same as in the former expedition.

Advancing up the Mississippi through Lac Traverse (Lake Bemidji) and up the eastern branch of the river through Lake Plantagenet of Schoolcraft's map (now called Lake Marquette), and portaging across the divide of land westward from its headwaters, Schoolcraft and Allen, guided by Ozawindib, came

on July 13 to Lac La Biche and landed on its island, to which Allen gave Schoolcraft's name. A few trees were cut at the head of the island, a flagstaff was erected, a small flag was hoisted and left, and the party on the same day began their canoe voyage of return down the Mississippi. They reached Cass lake July 15, where others of the party had spent five days resting. On July 16, as Allen wrote in his report to the War Department, "Mr. Schoolcraft held a council with the Indians of this band, and constituted the Indian Yellow Head a chief by presenting him with a large medal, the emblem of his authority."

Thence the expedition traveled south, by a canoe route with portages, to Leech lake and through a series of many small lakes and the connecting streams to the Crow Wing river, down this river to its mouth, and down the Mississippi, arriving on July 24 at Fort Snelling. The farther route, returning to Lake Superior, was by way of the Mississippi, St. Croix, and Brulé rivers.

No explanation of the origin and meaning of the name Itasca was given by Schoolcraft in his narrative of this expedition published in 1834; but in his later book, on the Cass expedition of 1820 and this of 1832, published in 1855, the following statement is made on page 243:

> I inquired of Ozawindib the Indian name of this lake; he replied Omushkös, which is the Chippewa name of the Elk. Having previously got an inkling of some of their mythological and necromantic notions of the origin and mutations of the country, which permitted the use of a female name for it, I denominated it Itasca.

The existence of this lake, and its French name, Lac La Biche, became known to Schoolcraft in 1820, during the earlier expedition; and he was doubtless impelled by this knowledge to make the second journey, so that he might publish the earliest description of the extreme source of the great river. The actual history of his coining this new word, Itasca, as narrated fifty years afterward by his companion in the expedition, Rev. William T. Boutwell, was told by Hon. J. V. Brower in the Minnesota Historical Society Collections (Volume VII, 1893, pages 144, 145) as follows:

Schoolcraft and Boutwell were personal associates, voyaging in the same canoe through Superior, and while conversing on their travels along the south shore of the great lake, the name "Itasca" was selected in the following manner, in advance of its discovery by Schoolcraft's party.

Mr. Schoolcraft, having uppermost in his mind the source of the river, expecting and determined to reach it, suddenly turned and asked Mr. Boutwell for the Greek and Latin definition of the headwaters or true source of a river. Mr. Boutwell, after much thought, could not rally his memory of Greek sufficiently to designate the phrase, but in Latin selected the strongest and most pointed expressions, "Veritas," and "Caput,"—Truth, Head. This was written on a slip of paper, and Mr. Schoolcraft struck out the first and last three letters, and announced to Mr. Boutwell that "Itasca shall be the name."

This expedition, supplementing the explorations of Pike, Cass, and Beltrami, in search of the sources of the Mississippi, completed the progress of discovery of this river, which had required more than three hundred years. What the Indians told to Le Sueur and Charleville, that the great river has its beginning in many small streams, was verified.

With the founding of the fort, in 1819-20, which at first was called Fort St. Anthony and later Fort Snelling, a new era of Minnesota history began. If we regard our entire history, like that of the Old World, as divisible into three parts, ancient, medieval, and modern, the first would comprise the period of French discovery and domination, extending through a hundred and eight years, from 1655 to 1763, terminating when France ceded all her North American possessions to England and Spain; the second would be the period of the early English-speaking explorers and pioneer fur traders, Captain Jonathan Carver, the elder Alexander Henry, and many who followed them; and the last or modern era would date from the building of Fort Snelling and the coming of the first agricultural settlers to its vicinity, in 1827, immigrants from the Selkirk Settlement.

Measured by years, our ancient history much exceeded either the medieval or the modern. But the last will continue through centuries whose achievements will very far surpass those of the past or the present time.

Chapter XV.

LONG, KEATING, AND BELTRAMI.

THE purchase of Louisiana and the prospective development of the Northwest had led to the treaty by Pike with the Sioux in 1805, securing for the United States sites at the mouths of the St. Croix and Minnesota rivers, one or the other to be later selected for building a frontier fort. Within the decade following Pike's expedition, the war with England prevented the western extension of army posts; but soon after the close of that war, for decision upon the merits of these two sites, a voyage of reconnaissance was made by Major Stephen H. Long, in 1817, ascending the Mississippi with a skiff to the Falls of St. Anthony. Two years later, Lieut. Col. Henry Leavenworth came with a detachment of troops; during the next five years the fort was built on the projecting point of the river bluff at the upper side of the mouth of the Minnesota river; and in 1824, on the recommendation of General Winfield Scott, who then visited the fort, its name was changed from St. Anthony to Snelling, in honor of Colonel Josiah Snelling, its builder and commander.

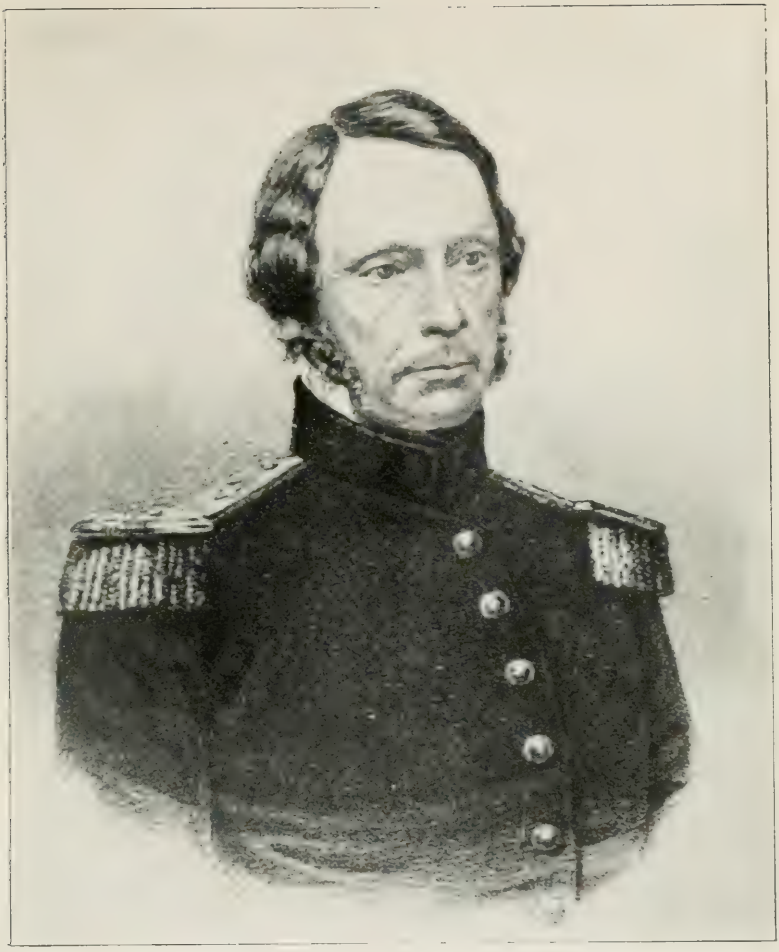
In accordance with orders from the War Department, an expedition under the command of Major Long, with a corps of scientists for observations of the geographic features, geology, zoology, and botany of the Northwest, traversed the area of Minnesota in 1823, passing from this fort up the Minnesota valley, down the valley of the Red river to Lake Winnipeg, thence up the Winnipeg river to the Lake of the Woods, and

thence eastward along the international boundary and partly in Canada to Lake Superior. Prof. William H. Keating, of the University of Pennsylvania, was the geologist and historian of this expedition. One of its members, or its guest, in the travel from the fort to Pembina, was Costantino Beltrami, a political exile from Italy; but, becoming offended, he left the expedition at Pembina and returned to the fort by the way of Red lake and the most northern sources of the Mississippi, traveling alone or with Indian companions.

MAJOR STEPHEN H. LONG.

Stephen Harriman Long was born in Hopkinton, N. H., December 30, 1784; and died in Alton, Ill., September 4, 1864. He was graduated at Dartmouth College in 1809; entered the army in 1814 as a lieutenant of engineers; was assistant professor of mathematics at West Point, until his promotion, in 1816, as brevet major of topographical engineers; had charge of explorations west and north of the Mississippi river, 1818-24; engaged in surveys of the Baltimore and Ohio railroad, 1827-30, and of the Western and Atlantic railroad in Georgia, 1837-40; became chief of topographical engineers in 1861, with rank of colonel; and retired from active service in 1863.

Major Long was in command of an expedition from Pittsburgh to the Rocky mountains in 1819-20, of which an account compiled by Edwin James, botanist and geologist for the expedition, was published, in two volumes and an atlas, at Philadelphia in 1823. During the same year another edition of this work, in three volumes, was issued in London. A reprint of the London edition has been recently published, in 1905, as Volumes XIV to XVII of "Early Western Travels," edited with notes, introduction, index, etc., by Dr. Reuben Gold Thwaites, secretary of the State Historical Society of Wisconsin. One of the most prominent summits of the Rocky mountains, about forty-five miles northwest of Denver, designated on the map of the London edition and its reprint with the name "Highest Peak," has since been called Long's Peak.



STEPHEN H. LONG.

The two northern expeditions of Long, to the Falls of St. Anthony in 1817 and six years afterward to the Minnesota and Red rivers and Lake Winnipeg, are narrated very concisely in the later pages of this chapter, with bibliographic references of their full publication.

PROF. WILLIAM H. KEATING.

William Hypolitus Keating was born in Wilmington, Del., August 11, 1799; and died in London, England, May 17, 1840. His father, Baron John Keating, was a colonel in the French army, but resigned his commission at the beginning of the Revolution and came to this country, settling in Delaware, and later removed to Philadelphia. The son William was graduated at the University of Pennsylvania in 1816, and afterward studied in polytechnic and mining schools of France and Switzerland. Returning to Philadelphia, he was elected to the newly established professorship of mineralogy and chemistry, as applied to the arts, in the University of Pennsylvania, which position he held from 1822 to 1828. He became a member of the American Philosophical Society in 1822, and two years later was influential in the founding of the Franklin Institute of Philadelphia, in which he was professor of chemistry. He also read law, was admitted to the bar, and was in successful practice, when he was commissioned to negotiate the first mortgage loan of the Reading railroad company, visited England, and died there. The service of Professor Keating in Long's expedition of 1823, and his publication of its narrative and scientific results, will be noted in the following pages.

COSTANTINO BELTRAMI.

Perhaps the most picturesque and unique figure in the series of many explorers of the area of Minnesota was Giacomo Costantino Beltrami, the Italian discoverer of the most northern lakes and river among the several or many reported by the Indians as sources of the Mississippi. Anglicized, his name was

James Constantine, and on the title-page of his published works, relating his travels, it is given by initials as J. C. Beltrami. Excepting David Thompson in 1798, he was the first explorer to supply descriptions of Red and Turtle lakes, though undoubtedly they had been previously visited by roving traders and their canoe voyageurs.

Beltrami was born at Bergamo, Italy, in 1779, being the youngest in a family of ten children. His father, who was a customs officer of the Venetian republic, advised him to the profession of the law, and he acquired a liberal education, including proficiency in Latin and Greek and in the modern languages. He held numerous official positions as a chancellor and a judge; but in 1821, being accused of implication in carbonarism, or plots to establish an Italian republic, he was exiled.

After traveling in France, Germany, and England, Beltrami sailed from Liverpool to Philadelphia, and arrived there February 21, 1823, by a stormy voyage of nearly sixteen weeks. About a month later he reached Pittsburgh, there made the acquaintance of Lawrence Taliaferro, and traveled with him by steamboat down the Ohio and up the Mississippi, coming on May 10 to the fort at the mouth of the Minnesota river by the steamer Virginia, the first ascending the Mississippi to that point.

Subsequent to his travels in Minnesota, the next winter was spent by Beltrami in New Orleans, where he published his narration in 1824, written in French, bearing a title which in English would be "The Discovery of the Sources of the Mississippi and of the Bloody River." He next traveled extensively in Mexico, crossing the country from east to west, and in 1826 or 1827 returned from the United States to London. In 1828 he published in London his most celebrated work, in two volumes, entitled "A Pilgrimage in Europe and America, leading to the Discovery of the Sources of the Mississippi and Bloody River; with a Description of the Whole Course of the former and of the Ohio." Two years later, in Paris, he published two volumes describing Mexico.

During his later years, until 1850, he resided in various cities of France, Germany, Austria, and Italy; and his last five years were spent on his land estate at Filotrano, near Macerata, Italy, where he died in February, 1855, at the age of seventy-five years.

The city of Bergamo, the birthplace of Beltrami, in 1865 published a volume of 134 pages commemorating his life and work, dedicated to the Minnesota Historical Society. In translation from this book, Alfred J. Hill, of St. Paul, presented in the second volume of this society's Historical Collections a biographic sketch of Beltrami, together with a communication from Major Taliaferro, giving reminiscences of him. The latter wrote:

> Beltrami was six feet high, of commanding appearance and some forty-five years of age; proud of bearing, and quick of temper, high spirited, but always the gentleman. He expressed an earnest wish to explore the sources of the Mississippi. I gave him a passport to go where he pleased, and instructed the Chippewas of Otter Tail and other lakes, to see him safely through their country, should be seek assistance. Shortly after this desire Maj. Long, of the Topographical Engineers, with his corps, arrived. Beltrami was introduced to Maj. L. and permission granted Mr. B. to accompany the party to Pembina. At Pembina, a difficulty occurred between Maj. Long and Beltrami, when the latter sold his horse (my horse) and equipments, and in company with a half-breed passed near the line of 49 degrees to the sources of the Mississippi. His sufferings were of no agreeable nature. Here, near Leech lake, he fell in with a sub-chief, the "Cloudy Weather," most fortunately, who knew Mr. B., having seen him in one of my councils at the agency. This old man was given, by signs, to know that white man wanted to descend the river. The chief took our Italian friend in his canoe, and turned down stream. Indians are proverbially slow, hunting and fishing on the way; Beltrami lost all patience, abused his Indian crew, made many menaces, etc. The "Cloud" tapped him on the hat with his pipe stem, as much as to say, "I will take you to my father safe, if you will be still." The old chief told of this temper of my friend, but Mr. B. never made allusion to it, but was very grateful to his kind Pillager [Ojibway] friends.

Another memorial book, of 144 pages, in honor of Beltrami, was published in 1902 at Florence by his grandniece, Eugenia Masi. He is also commemorated by a large county of northern

Minnesota, comprising Red lake and Turtle lake and river, established and named Beltrami county by the state legislature in 1866; and by a former large island of the Glacial Lake Agassiz, which the present writer in 1893 named Beltrami island.

JOURNEY OF LONG TO THE FALLS OF ST. ANTHONY, 1817.

In the summer of 1817 the War Department sent Major Long to examine sites on the Wisconsin and upper Mississippi rivers, where forts might be built, and to make detailed plats of Fort Crawford, already built at Prairie du Chien, near the mouth of the Wisconsin river, of Fort Armstrong, on the Rock Island of the Mississippi, and of Fort Edwards, on the east side of this river three miles below the Des Moines rapids. He made the journey with a six-oared skiff presented to him for this purpose by William Clark, governor of Missouri Territory, which reached to the British line. It was not till the next year that the Webster-Ashburton Treaty definitely placed that boundary on the 49th parallel.

Long ascended the Wisconsin river to the much frequented portage of the Indians and white traders, adjoining the site of the present city of Portage, Wis., on the canoe route to the Fox river and Green bay. Returning thence down the Wisconsin to the Mississippi, he began on July 9 the voyage up the great river above Prairie du Chien.

A week later, on the morning of Wednesday, July 16, the party breakfasted at Carver's cave; stopped a few miles farther on at the Fountain cave, in the west part of the city area of St. Paul, pronounced "far more curious and interesting," and said to have been unknown by the Indians until within six years; arrived at the mouth of the St. Peter's (Minnesota) river at two o'clock, and stopped to eat dinner there; and by hard work in rowing, poling, sailing with a strong wind to aid, and partly by towing, the skiff was brought up at evening to a landing on the eastern shore about three quarters of a mile below the cataract of St. Anthony, where they encamped, near the site of

the State University. The view from this place was enthusiastically described in Long's journal, as "the most interesting and magnificent" that he had ever seen.

Late in the forenoon of the next day, Long and his boat party began their return down the Mississippi. Two or three hours were spent in examining the vicinity of the mouth of the Minnesota river, of which Long wrote: "A military work of considerable magnitude might be constructed on the point [beneath where Fort Snelling afterward was built], and might be rendered sufficiently secure by occupying the commanding height in the rear in a suitable manner, as the latter would control not only the point, but all the neighboring heights, to the full extent of a twelve-pounder's range. The work on the point would be necessary to control the navigation of the two rivers."

The next day, on July 18, Long similarly examined the country adjoining the mouth of the St. Croix, in relation to its advantages for a military post.

His stock of provisions was already nearly exhausted, and therefore a delay through the afternoon was allowed at the village of the old Sioux chief Red Wing, for catching fish, and Long ascended the Barn bluff, called by its French name of the Grange in his journal. He wrote: "From the summit of the Grange the view of the surrounding scenery is surpassed, perhaps, by very few, if any, of a similar character that the country and probably the world can afford. The sublime and beautiful are here blended in the most enchanting manner, while the prospect has very little to terrify or shock the imagination."

Lake Pepin was passed with some trouble from a gale. On July 20 a delay was taken for ascent of a conspicuous part of the western river bluff, near the site of Richmond in Winona county, which was reputed to be the highest point on the Mississippi; but from its top the neighboring parts of the bluffs, and the country extending thence away from the deeply eroded valley, were seen to have nearly the same height.

Prairie du Chien was reached in the evening of July 21, thirteen days having been occupied in the round trip to and from the Falls of St. Anthony, for reconnaissance of the site to

be fortified within a few years as the most northwestern post of the United States army.

The journal written by Major Long on this voyage and in its continuation down the Mississippi, with notes on the surveys of Forts Crawford, Armstrong, and Edwards, first published by the Minnesota Historical Society in 1860 and reprinted in 1889, forms pages 7-83 in its second volume of Historical Collections. In the next five pages Alfred J. Hill contributed a sketch map, topographic notes, and a table of distances, comparing the estimated distances of Long with exact determinations from the United States land surveys.

EXPEDITION TO LAKE WINNIPEG, 1823.

The far northern expedition of Major Long was made in accordance with an order of the War Department dated April 25, 1823, which defined the route and object thus:

> The route of the expedition will be as follows: commencing at Philadelphia, thence proceeding to Wheeling in Virginia, thence to Chicago via Fort Wayne, thence to Fort Armstrong on Dubuque's Lead Mines, thence up the Mississippi to Fort St. Anthony, thence to the source of the St. Peter's River, thence to the point of intersection between Red River and the forty-ninth degree of north latitude, thence along the northern boundary of the United States to Lake Superior, and thence homeward by the Lakes.
>
> The object of the expedition is to make a general survey of the country on the route pointed out, together with a topographical description of the same, to ascertain the latitude and longitude of all the remarkable points, to examine and describe its productions, animal, vegetable, and mineral; and to inquire into the character, customs, &c., of the Indian tribes inhabiting the same.

On the last day of April the party left Philadelphia. It consisted of Major Long, in command; Thomas Say, zoologist and antiquary; William H. Keating, mineralogist and geologist; and Samuel Seymour, landscape painter. Say and Keating were jointly commissioned as journalists and ethnologists of the expedition. James E. Colhoun, astronomer and assistant topographer, joined the party at Columbus, Ohio, on May 20.

They reached Fort Dearborn, on the site of Chicago, June 5, and were very unfavorably impressed by that place and the adjoining country. Their prospects for commerce and for agriculture were disparaged, probably more emphatically because the soil and climate had been highly praised three years before by Schoolcraft, so that Long and Keating thought immigrants likely to be deceived and induced to come there with high hopes doomed to disappointment.

The expedition left Chicago on June 11, and in eight days reached Prairie du Chien, where they remained five days, till June 24. They thence went forward reinforced by an escort of ten soldiers, under the command of Lieutenant Martin Scott, of the Fifth Regiment, U. S. Infantry. Long also there secured the service of a half-breed Sioux interpreter named Augustin Roque.

At Prairie du Chien the party was divided by Major Long, for the journey thence to the fort at the mouth of the Minnesota river, himself and Colhoun going on horseback along the west side of the river and across the adjoining country, with attendants and a Sioux guide, while the others voyaged up the river. The land party crossed the Root river in the morning of June 28, and at evening came to the village of the Sioux chief Wabasha, on or near the site of the city of Winona. From the notes of Long and Colhoun, the following description was written by Keating:

> * * * an Indian village, consisting of twenty fixed lodges and cabins. It is controlled by Wapasha, an Indian chief of considerable distinction. In his language (Dacota), his name signifies the red leaf. A number of young men, fantastically decorated with many and variously coloured feathers, and their faces as oddly painted, advanced to greet the party. One of them, the son of the chief, was remarkable for the gaudiness and display of his dress, which, from its showy appearance, imparted to him a character of foppishness. In his hair he wore two or three soldiers' plumes; his moccasins of stained buckskin were tastefully puckered at the toes, and his breech-cloth was quite tawdry. The chief is about fifty years of age, but appears older; his prominent features are good, and indicative of great acuteness and of a prying disposition; his stature is low; he has long been one of the most influential of the Dacota Indians, more perhaps from

his talents in the counsel than his achievements in the field. He is represented as being a wise and prudent man, a forcible and impressive orator.

On the evening of June 30, Major Long arrived at the village of the chief Red Wing, then called Shakea; and in the next forenoon the boat party arrived there. By invitation of Shakea, a ceremonious council was held in his cabin, over which he hoisted the United States flag. Being shown the map of the upper Mississippi region used for the expedition, the Indians readily understood it, traced and named its rivers, and one of them "laid his finger upon the Falls of St. Anthony, which he called Hahawotepa."

On the afternoon of July 1, Major Long's party continued their journey by land, and reached the Fort St. Anthony (Snelling) at evening of the next day.

The larger number, Say, Keating, Seymour, the military escort, and the interpreter, went forward with their eight-oar barge, which could be provided with a sail when the wind favored. On July 2 this party stopped a few minutes to examine the Red Rock, near the east shore of the river, "held in high veneration by the Indians; on account of the red pigment with which it is bedawbed, it is generally called the painted stone. * * * It is a fragment [a boulder] of sienite, which is about four and a half feet in diameter."

The Indian cemetery on Dayton's bluff, and the village of Little Crow, then situated at or near the eastern part of the site of the principal railway yards in St. Paul, east of the present union depot, were seen and described by Keating as follows:

The party landed at a short distance above, to visit the cemetery of an Indian village, then in sight. The cemetery is on the banks of the river, but elevated above the water's level; it exhibits several scaffolds, supporting coffins of the rudest form; sometimes a trunk (purchased from a trader), at other times a blanket, or a roll of bark, conceals the body of the deceased. There were, also, several graves, in which are probably deposited the bones, after all the softer parts have been resolved into their elements by long exposure to the atmosphere. Returning to the boat, the party ascended and passed an Indian village, consisting of ten or twelve huts, situated at a handsome

turn on the river, about ten miles below the mouth of the St. Peter; the village is generally known by the name of the Petit Corbeau, or Little Raven, which was the appellation of the father and grandfather of the present chief. He is called Chetan-wakoamane (the good sparrow-hunter). The Indians designate this band by the name of Kapoja, which implies that they are deemed lighter and more active than the rest of the nation. As the village was abandoned for the season, we proceeded without stopping. The houses which we saw here were differently constructed from those which we had previously observed. They are formed by upright flattened posts, implanted in the ground, without any interval, except here and there some small loopholes for defence; these posts support the roof, which presents a surface of bark. Before and behind each hut there is a scaffold, used for the purpose of drying maize, pumpkins, &c. The present chief is a good warrior, an artful, cunning man, remarkable among the Indians for his wit, and, as is said, for his courtesy to white men, endeavouring, as far as he can, in his intercourse with the latter, to imitate their manners.

Apparently the burial place of the Sioux here described was on the lower northwestern part of Dayton's bluff, above Carver's cave, where these Indians fifty-seven years before, in Carver's time, were accustomed to bring their dead. A group or series of many small artificial mounds marked the place within the memory of the first white settlers. It is about a third of a mile northwest from the large mounds preserved in the Indian Mounds Park at the highest part of this bluff.

Six years earlier, in 1817, Long had found Little Crow's village about two miles farther down the river, on its east side, then having fourteen cabins, of which he wrote, "The cabins are a kind of stockade buildings, and of a better appearance than any Indian dwellings I have before met with." This was at or near the spot where Pike had visited Little Crow's eleven lodges in 1805. Pike wrote of this village as "just below a ledge of rocks," which must refer to Dayton's bluff; Long in 1817 noted its situation as two miles below Carver's cave, which was in the base of that bluff; and Schoolcraft, who came with Cass in 1820, described the village, with its fields of corn, cucumbers, and pumpkins, as four miles below the cave. Before the summer of 1823, it had been removed to the northwestern or up-

per side of Dayton's bluff, where the river turns in a broad curve from a northwestward to a southward course.

After the Sioux by a treaty in the city of Washington, on September 29, 1837, ceded their lands east of the Mississippi here, the Kaposia band had their village on its west side, occupying a part of South Park, a suburb of South St. Paul. Thus the village of Kaposia was changed several times in its situation. It may be regarded as the precursor of the city of St. Paul, having been temporarily placed near the center of this city's area at the time of the 1823 expedition.

The boat party entered the mouth of the Minnesota river, then called the St. Peter, late in the night of July 2; and a stay of a week was made there, for rest and to visit the Falls of St. Anthony.

Provided by Colonel Snelling at the fort with a new and more efficient escort of twenty-one soldiers, with Joseph Renville, instead of Roque, as their Dakota interpreter, and with Joseph Snelling, a son of the colonel, as assistant guide and interpreter, the expedition set forward on July 9 up the Minnesota valley. A part traveled on horseback, including Say and Colhoun, while the others, including Long, Keating, Seymour, and Renville, went in four canoes, which also carried the bulk of their stores and provisions. It was planned that the land and river parties "should, as far as practicable, keep company together, and encamp every night, if possible, at the same place."

On July 13 they reached the vicinity of Traverse des Sioux, and encamped at a beautiful bend of the river, called the Crescent. Here the expedition left the canoes, reduced the escort, and on July 15 moved westward by the route of Swan lake. They now numbered in total twenty-four men, with twenty-one horses. The most southern part of the course of the Minnesota having been cut off by the journey past Swan lake, this stream was again reached and crossed a short distance below the mouth of the Cottonwood river. Thence the expedition passed along the southwestern side of the valley, and across the contiguous upland prairies, to Lac qui Parle and Big Stone lake. The latter lake was reached on July 22, and the Columbia Fur Company's

trading post, at the southern end of Lake Traverse, the next day.

From officers of this company the annual production of furs in this region, south of the international boundary, was noted as having a value, in the Montreal market, of about $65,000. A fourth part of the value was estimated to consist of about 4,000 buffalo skins, rated at an average of $4 each. The value of fisher skins was estimated as $11,250; of muskrat, $8,000; otter, $6,000; lynx, $5,600; beaver, $4,000; elk skins, at five dollars apiece, $3,200; marten, $3,000; mink, $2,000; dressed buffalo skins at $5 each, $1,600; bear skins, at $6.25, $1,500; fox, $1,300; moose, $800; wolves, $400; etc. The country also supplied, for the use of the fur traders and voyageurs, about a thousand bags of pemmican yearly, valued at $4,000, this being smoked and pounded buffalo meat preserved by mixing it with an equal weight of buffalo fat poured on when hot and liquid.

The journey northward along the Bois des Sioux and Red rivers, passing down the east side of the latter to Pembina, occupied ten days, from July 26 to August 5; and a stop of four days was made at Pembina, close south of the British line.

Major Long had intended to proceed east from the Red river along the 49th parallel to the Lake of the Woods; but on learning that the country to be thus crossed was impracticable for a journey with horses, because of its swamps, he decided to carry out his instructions for the expedition as nearly as possible by traveling with canoes along the routes of the fur traders, through Lake Winnipeg, the Lake of the Woods, and Rainy lake, and thence eastward by many small lakes and streams to Lake Superior.

At Forts Garry and Douglas, belonging respectively to the Hudson Bay Company and the Selkirk colony, on the site of the city of Winnipeg, the expedition rested six days, from August 11 to 17. Thence the farther journey down the Red river, along the southeast shore of Lake Winnipeg, up the Winnipeg river to the Lake of the Woods, along the Rainy river, through Rainy lake, and by many lakes and portages to Dog lake and river and to Fort William on Thunder bay of Lake Superior,

was made with birch canoes. Six members of the party had left this expedition at Pembina, and it was reinforced at Forts Garry and Douglas by an Ojibway interpreter, a pilot, and nine canoe-men, the latter being Canadians and half-breeds. In setting out with their three canoes, the whole party comprised twenty-nine men.

The town which has since grown to form the present large city of Winnipeg was described by Keating as follows:

> The population of the settlement amounts to about six hundred. There is an appearance of neatness, and even of comfort, in many of the cabins belonging to the Swiss and Scotch settlers. The agricultural improvements are daily becoming more respectable, and adding to the prosperity of the colony. The soil is not so good as at Pembina, yet large crops of grain have been obtained. It appears well adapted to the growth of wheat, barley, oats, and potatoes. Maize has not yet had a fair trial. Of wheat they have repeatedly obtained from twenty to forty and even more bushels to the acre. Perhaps the greatest desideratum at Fort Douglas is wood, which, growing only upon the banks of the rivers, is becoming scarce. They have a few tradesmen and manufacturers among them. A tanner, who appears to understand his business well, has been brought over, and makes very good leather from buffalo hides, so that they are not all at present reduced to the necessity of wearing moccasins. An attempt has also been made to convert the wool of the buffalo to some useful purpose. An association has been formed for this object, which has contracted with the Hudson's Bay Company for the requisite supply of skins; they pluck out the hair that covers the wool; and then separate the latter by an ingenious process into the different qualities, which are said to be no less than eight or nine. The coarse wool is manufactured into a good substantial cloth; the fine qualities are sent to England, where, it is said, they find a ready market.

On August 18 the expedition entered Lake Winnipeg, and the next day they reached Fort Alexander, at the mouth of the Winnipeg river, where a day was spent in repairing one of their canoes. The ascent of the Winnipeg river required five days, and Rat portage was passed on August 25, the canoes being launched at the upper end of this portage upon the Lake of the Woods.

Thence the route to Lake La Croix, at the west end of Hunter's Island, was on the northern lake and river boundary

of Minnesota. The expedition again stopped for repairs of the canoes during two days, August 31 and September 1, at the trading posts of the American Fur Company and the Hudson Bay Company, respectively on the south and north sides of the Rainy river at its Koochiching falls, near the mouth of Rainy lake. In passing along the northwestern side of Hunter's Island and onward, they followed a Canadian water route, arriving on September 13 at Fort William. Thence, having left the canoes, they coasted along the northern and eastern shores of Lake Superior in an old boat about thirty feet long, and arrived at the Sault Ste. Marie on the last day of September.

Four days later they reached Mackinaw, where the party was divided. The military escort returned to Fort St. Anthony. Major Long and his scientific associates sailed to Detroit and to Buffalo, and thence traveled by way of Rochester, Albany, and New York, to Philadelphia, arriving there on October 26, after an absence of almost six months and a total journey of more than 4,500 miles.

The narrative of this expedition and of its observations on the geographic features, geology, fauna, flora, and climate, and on the Indians, compiled by Professor Keating, was published the next year in two volumes at Philadelphia; and in 1825 an edition of it, also in two volumes, appeared in London. Following the narrative by Keating is a chapter by Major Long, giving a general description of the country traversed, written as a topographical report to the War Department. Important scientific reports are appended, on zoology, by Thomas Say; botany, by Lewis D. de Schweinitz; astronomic determinations of latitude and longitude, by J. Edward Colhoun; meteorology, by Dr. Joseph Lovell; and vocabularies of the Sauk, Dakota, Ojibway, and Cree languages, by Keating and Say. These volumes were a great contribution to the natural history and ethnology of the Northwest, surpassing in value any other of the numerous official expeditions sent into the area of Minnesota by our national government, except the geological survey by Owen twenty-five years later.

JOURNEY OF BELTRAMI TO RED LAKE AND ON THE UPPER MISSISSIPPI.

The very sentimental and probably impatient and critical temperament of the Italian exile, Beltrami, was little apt to ingratiate him into the good will and friendship of the military and otherwise severely practical leaders of this expedition. Beltrami had been commended to Major Long by Snelling and Taliaferro, but mutual disappointment resulted during their association in the journey from the fort to Pembina. The repugnance of Keating toward Beltrami is indicated by his omitting any reference to him in his "Narrative," except in a footnote which says: "An Italian gentleman, whom we found at Fort St. Anthony, asked and obtained leave to travel with the expedition: he continued with them until the 7th of August. This is the gentleman who has lately published an account of his discoveries on the Mississippi; we have read it."

The publication thus mentioned is the book in French, issued at New Orleans in 1824, before noted in our sketch of Beltrami's life. His "Pilgrimage," issued four years afterward in London, presented his adventures of travel as an exile during the years 1821-23, in Europe, in the long voyage across the Atlantic, and in the United States. This work of two volumes, cast in the form of a series of twenty-two letters, addressed in terms of most affectionate respect to an Italian countess, describes the countries which he visited, tells his experiences, and gives his comments concerning persons and events.

Letters XIV to XXI, in pages 126 to 491 of Volume II, contain Beltrami's account of his travels in Minnesota, which we will here briefly notice in the part comprising his return from Pembina to the Fort St. Anthony.

Having left the expedition at Pembina, he traveled southeastward along an Indian trail, with two Ojibways and a half-breed interpreter, to the junction of the Thief and Red Lake rivers, whence his journey was by canoe up the latter river to Red lake. The interpreter had returned home from the mouth

J. CONSTANTINE BELTRAMI.

of Thief river, and at the distance of five or six miles thence a party of Sioux attacked his two Ojibway companions, painfully wounding one of them in the arm with a rifle ball. The next day these Ojibways, deserting Beltrami and their canoe, hurried forward by a shorter land route to Red lake, leaving him to come there alone, as best he could, following the meandering river. His inexperience in canoeing caused him, after becoming fatigued with paddling, and after upsetting and drenching his provisions, baggage, gun and sword, to continue the navigation of the stream by wading and towing the canoe. But he was undaunted and even cheerful, as he wrote:

> While thus dragging after me my canoe, with a cord over my shoulder, an oar in my hand for my support, my back stooping, my head looking down, holding conversation with the fishes beneath, and making incessant windings in the river, in order to sound its depth, that I might safely pass; I must leave it to your imagination to conceive the variety and interest of the ideas which rapidly passed in review before my mind. * * *
>
> The weather on the second day of my progress was very disagreeable. A storm which commenced before mid-day continued till night. Notwithstanding this, however, I did not relax an instant but to take my food. I saw the hand of providence in the physical and moral vigour which supported me during this dreadful conflict. In the evening I had no access to a more comfortable hearth than on the preceding one. My bear skin and my coverlid, which constituted the whole of my bed, were completely soaked; and, what was worse, the mould began to affect my provisions. * * *
>
> On the morning of the 17th, the sun's beams gilded the awful solitude by which I was surrounded, and I eagerly availed myself of their influence. * * * The river became narrower and deeper the farther I ascended it, as is the case with all rivers originating in lakes. It was thus absolutely indispensable for me to learn how to guide the canoe with the oar. I set myself, therefore, to study this art in good earnest; and in the afternoon, when I struck my tent, I exerted myself first to pass several deep gulfs, and afterwards to traverse short stages or distances of the river; but the fatigue I endured was extreme, and I preferred returning to my drag-rope whenever the river permitted my walking in it. As appearances seemed to threaten rain, I covered my effects with my umbrella, stuck into the bottom of my canoe. It was singular enough to see them conveyed thus in the stately style and manner of China, while I was myself condemned to travel in that of a galley slave. * * * As it was of consequence for me

to avail myself of everything that could promote cheerfulness and keep up my spirits, I could not help smiling, which I am sure, my dear Countess, you would yourself have done, at the sight of my grotesque convoy. This night was less painful; my bed was dry; and, but for the millions of gnats, which incessantly attacked me, and almost flayed me alive, I am convinced that I should have enjoyed sound and uninterrupted sleep.

After four days of his solitary travel up the Red Lake river, Beltrami met a canoe party of Ojibways, one of whom, an old man, he persuaded to take him and his canoe to Red lake, where they arrived in the evening of August 19, by two days of rowing. From an Ojibway village near the mouth of the lake, Beltrami traveled with a canoe along its southwestern shore to the Little Rock or Gravel river, where he stopped at the hut of a half-breed, who became his guide.

August 26 and 27 were spent in making long portages with the half-breed and an Ojibway, leaving the south shore of Red lake probably near the site of the Agency and going south, passing small lakes and coming at last, by a few miles of canoeing on the upper part of the stream called Great Portage river, now mapped as the Red Lake river, to Lake Puposky, now called Mud lake.

Proceeding still southward the next morning, Beltrami soon came to a lake named by him Lake Julia, which he thought to have no visible outlet, but to send its waters by filtration through the swampy ground both northward and southward, being thus a source both of the Red Lake river, called by him Bloody river, and of the Turtle river, the most northern affluent of the Mississippi. The narrative of Beltrami shows that he arrived at Lake Julia by a short portage; but on a detailed map of the recent United States land surveys it is shown as having an outlet northwesterly into Mud lake, thus belonging to the Red river basin. About half a mile of swampy land extends across the continental watershed separating Lake Julia from the Little and Big Turtle lakes, one level connected by a strait; and from a southeastern arm of the latter the Turtle river, called by Beltrami the Mississippi, flows eastward.

On September 4 Beltrami reached Red Cedar lake, since known as Cass lake; and during the next three days he voyaged down the Mississippi to the mouth of Leech Lake river. Thence he went up that stream to Leech lake, where he made the acquaintance of Cloudy Weather, a leader in the band of the Pillager Ojibways, by whom he was accompanied in the long canoe voyage of return to the Mississippi and down this river to Fort St. Anthony. They reached Sandy lake on the evening of September 17; left there on the 21st, and on the last day of this month arrived at the fort.

Joseph Snelling, who had accompanied Long's expedition to Pembina and thence returned to the fort by the route of the Red and Minnesota rivers, had brought tidings of Beltrami's setting out on this journey to the sources of the Mississippi and southward down the great river; but it was already deemed probable that he had perished on his lone journey through the Ojibway country. He was therefore received with much surprise and rejoicing by Taliaferro and by Colonel Snelling and his family.

Beltrami spent only a few days at the fort, and on October 3 departed, taking passage down the Mississippi in a keel-boat, and reached St. Louis on October 20. Thence the farther journey to New Orleans appears to have been made in a leisurely manner, as his next letter, the last in this series addressed to the countess, is dated there December 13, 1823.

During a third part of a thousand years, from Vespucci in 1498 at the mouth of the Mississippi to Beltrami at Lake Julia and to Schoolcraft at Lake Itasca in 1832, the discovery of this mighty stream from its mouths to its sources, had been in progress, carried forward by Spanish, French, American, and Italian explorers, and was thus completed.

Chapter XVI.

LATER EXPLORATIONS.

SINCE Fort Snelling was built and in 1824 received this name, and since the Mississippi was explored to its farthest sources, with their publication by the narratives and maps of Beltrami and Schoolcraft respectively in 1828 and 1834, many other explorers have examined parts of the area of this state. It will be sufficient here to enumerate them and give very brief statements of their work.

FEATHERSTONHAUGH AND MATHER.

In September and October, 1835, a geological examination of the southwestern part of Minnesota was made, under a commission as United States geologist, by George William Featherstonhaugh, traveling from Green Bay to Fort Snelling, the Minnesota river valley, and the Coteau des Prairies. His report, in 168 pages, was printed by order of the United States Senate in 1836; and a more extended narrative of this journey, forming two volumes, entitled "A Canoe Voyage up the Minnay Sotor," was published in London in 1847. Featherstonhaugh was accompanied by William Williams Mather, who during the next eight years had charge of the geological survey of a large part of New York state, besides other surveys or reconnaissances in Ohio and Kentucky. Their route was by the Minnesota river to the lakes Big Stone and Traverse, and to the high sources of the Minnesota on the Coteau des Prairies west of these lakes.

Featherstonhaugh was born in London in 1780; received a fine education in England; and afterward traveled several years in other countries, including the United States, where he married and settled at Duanesburgh, near Schenectady, N. Y. In 1826, with Stephen Van Rensselaer, he secured the charter to build a railroad from Albany to Schenectady, one of the earliest built for passenger travel in this country. After his geological expeditions for the United States Government, traversing the region of the Ozark mountains in 1834 and southern Minnesota in the autumn of the next year, he returned to England. A few years later, under appointment as a commissioner of the British government, he surveyed parts of the proposed boundaries between the United States and the British possessions, preliminary to the treaty on this subject by Webster and Lord Ashburton in 1842. In reward for that service he was appointed in 1844 as the British consul at Havre, France, which official position he held twenty-two years, until his death there September 28, 1866. An interesting memoir of him, written by his son, is in the American Geologist (volume III, pages 217-223, with a portrait, April, 1889).

Mather was born in Brooklyn, Conn., May 24, 1804; was graduated at the West Point Military Academy in 1828; was during several years assistant professor there of chemistry, mineralogy, and geology; traveled in Minnesota with Featherstonhaugh in 1835; was one of the geologists of the New York state survey, 1836-44, publishing annual reports and a voluminous final report; conducted the first geological surveys of Ohio and of Kentucky, 1837-40; was professor of natural sciences in the Ohio University, at Athens, Ohio, 1842-50; was agricultural chemist for the state of Ohio, 1850-54; and wrote many reports and papers on geology, mining, and agriculture. A map of the Minnesota river which he drafted from his observations in 1835 was published by Featherstonhaugh in 1847, with his work before cited. Mather died in Columbus, Ohio, February 26, 1859.

A biographic sketch of Mather, by Prof. C. H. Hitchcock, with a portrait and notes of his writings, was published in the American Geologist (volume XIX, pages 1-15, January, 1897).

GEORGE CATLIN.

Under date of February 22, 1851, a letter of Professor Mather to the Minnesota Historical Society, on the occasion of his election to its membership, is given in its first volume of Historical Collections, noting his travels in Wisconsin and Minnesota. His manuscript report of that expedition was not published.

ALBERT LEA.

Another government expedition in the year 1835, commanded by Lieut. Albert Miller Lea, traversed the area which is now Iowa and advanced into the south edge of Minnesota. One day they passed two beautiful lakes where now is the county seat of Freeborn county, the attractive and growing city of Albert Lea. The commander mapped these lakes and named them as Fox and Chapeau lakes; but Nicollet, in his admirable map published eight years afterward, called the larger one Lake Albert Lea, whence came the name of the city.

Lea was born in Richland, Grainger county, Tennessee, July 23, 1808; was graduated at West Point in 1831; aided Major Long in 1832, in surveys of the Tennessee river; was an assistant on surveys of Lake Michigan in 1833; was in military service on the Missouri and Mississippi rivers during 1834; and in the summer of 1835 led the exploring expedition here noticed. With three companies of infantry, five four-mule teams, and several pack-horses, Lieutenant Lea traveled along the divide between tributaries of the Des Moines and Mississippi rivers, thence to the foot of Lake Pepin, and thence westward across the headwaters of the Cedar and Blue Earth rivers. Descending the Des Moines in a canoe, Lea mapped it and described it in his journal, which was the basis of a report to the War Department, and of a pamphlet in 53 pages, with a map published the next year in Philadelphia. In this publication, Lea first gave the name Iowa to the district afterward so called as a territory and state, deriving it from the Iowa Indians and the river bearing their name.

An autobiographic sketch of Albert M. Lea was published in the Freeborn County Standard, March 13, 1879. He resigned

from the army in 1836; resided in Tennessee, and after 1857 in Texas; and was an engineer of the Confederate service during the Civil War. He died January 17, 1891. Two of his brothers were Pryor Lea, a member of Congress, and Luke Lea, who, as Commissioner of Indian Affairs, was associated with Governor Ramsey in 1851 in making the treaties of Traverse des Sioux and Mendota.

GEORGE CATLIN.

In the summers of 1835 and 1836 an exceptionally gifted man, George Catlin, visited Fort Snelling and made extensive journeys in this state.

Catlin was born in Wilkesbarre, Pa., July 26, 1796; studied law at Litchfield, Conn.; became noted as an amateur artist; traveled among nearly all the Indian tribes of the United States, painting portraits of the Indians, hunting scenes, etc., exhibited his Indian gallery in New York, Philadelphia, Washington, Boston, and elsewhere, 1837-39, and in London and other cities of England and Ireland, 1840-45, afterward in Paris, and again in London, 1848-50; traveled much in Central and South America, during the years 1852-57; spent the next thirteen years in Europe, mostly in Brussels, Belgium, engaged in making additional paintings from sketches taken during his former travels; returned to the United States in October, 1870; and died in Jersey City, N. J., December 23, 1872. He published many works, skillfully illustrated by himself, describing the North American Indians. Several hundred of his paintings, portraying the chiefs, women, children, customs, and mode of life of these people, are preserved in the National Museum at Washington.

The second volume of the annual report of the Smithsonian Institution for 1885, relating to the museum, contains a very elaborate monograph of 939 pages, with 144 plates, entitled "The George Catlin Indian Gallery in the United States National Museum, with Memoir and Statistics," by Thomas Donaldson. This work includes three portraits of Catlin, at the ages of

twenty-eight, forty-five, and seventy-two years; a bibliography of his published writings; extensive quotations from them, historically arranged; and much general information concerning the Indians.

Catlin first came to Fort Snelling in June, 1835, by a steamer from St. Louis; and returned in a canoe, stopping at various places to make paintings.

The next year he came again, traveling with a birch canoe from Green Bay to Prairie du Chien and thence up the Mississippi to Fort Snelling in the early summer, and similarly returned with a dug-out canoe in the autumn to Rock Island, thence going east.

During the meantime, the summer of 1836, with a Dakota guide and one comrade, an Englishman named Wood, he traveled on horseback from the Falls of St. Anthony to the Coteau des Prairies and the Pipestone Quarry, a spot then renowned among the Indians and since made famous through all the world by Longfellow's poem, "The Song of Hiawatha." Catlin wrote of this journey and of the quarry (in Letters and Notes * * * written during Eight Years' Travel, etc., 1841, volume II, pages 201, 202), as follows:

> For many miles we had the Coteau in view in the distance before us, which looked like a blue cloud settling down in the horizon; and we were scarcely sensible of the fact, when we had arrived at its base, from the graceful and almost imperceptible swells with which it commences its elevation above the country around it. Over these swells or terraces, gently rising one above the other, we travelled for the distance of forty or fifty miles, when we at length reached the summit; and from the base of this mound to its top, a distance of forty or fifty miles, there was not a tree or bush to be seen in any direction, and the ground everywhere was covered with a green turf of grass, about five or six inches high; and we were assured by our Indian guide, that it descended to the West, towards the Missouri, with a similar inclination, and for an equal distance, divested of every thing save the grass that grows, and the animals that walk upon it.
>
> On the very top of this mound or ridge, we found the far-famed quarry or fountain of the Red Pipe, which is truly an anomaly in nature. The principal and most striking feature of this place is a perpendicular wall of close-grained compact quartz, of twenty-five and thirty feet in elevation, running nearly North and South with its

face to the West, exhibiting a front of nearly two miles in length, when it disappears at both ends by running under the prairie, which becomes there a little more elevated, and probably covers it for many miles, both to the North and the South. * * *

At the base of this wall there is a level prairie, of half a mile in width, running parallel to it; in any and all parts of which, the Indians procure the red stone for their pipes by digging through the soil and several layers of the red stone, to the depth of four or five feet. From the very numerous marks of ancient and modern diggings or excavations, it would appear that this place has been for many centuries resorted to for the red stone; and from the great number of graves and remains of ancient fortifications in its vicinity, it would seem, as well as from their actual traditions, that the Indian tribes have long held this place in high superstitious estimation; and also that it has been the resort of different tribes, who have made their regular pilgrimages here to renew their pipes.

The red pipe stone, I consider, will take its place amongst minerals, as an interesting subject of itself; and the "Coteau des Prairies" will become hereafter an important theme for geologists; not only from the fact that this is the only known locality of that mineral, but from other phenomena relating to it.

A sample of the pipestone was carried away by Catlin, and was subjected to chemical examination by Dr. Charles T. Jackson of Boston, who gave to it the mineralogical name of catlinite.

JOSEPH NICOLAS NICOLLET.

The first large map of nearly all the area of Minnesota, excepting only a small part about the Lake of the Woods and westward, was drafted by Joseph Nicolas Nicollet, and was published shortly after his death, in 1843, with his report of 170 pages on the basin of the upper Mississippi river. The map and report thus published by order of Congress embodied results of his surveys while employed under the United States Bureau of Topographical Engineers. In the area of this state the map preceded white settlements and showed no village, except that of the Ojibways at the narrows of Red Lake and a few Dakota villages on the Minnesota river.

JOSEPH NICOLAS NICOLLET.

Sibley, in his memoir of Nicollet (Minnesota Historical Society Collections, Vol. I, pp. 183-195) said: "One of the results of Nicollet's labors was the magnificent map which bears his name, and which has associated it with that part of our own section of country for all time to come. Although that map is imperfect in its details, as all must necessarily be that are not based upon an actual survey of all the region therein delineated, yet its main points are remarkable for their correctness, especially of those parts which he visited in person. * * * I have reason to know that M. Nicollet had collected ample materials for a work to consist of several volumes, relating principally to what is now Minnesota, in which it was his intention to elaborate the several departments of its geology, topography and geographical position, and many interesting topics connected with the Indian tribes, to be found therein, the structure of their several languages, and to state well-grounded opinions as to the condition of the races which preceded them."

Nicollet was born July 24, 1786, at Cluses, in Savoy; completed his studies in Paris, where, in 1817, he became an officer of the astronomical observatory; in 1819 he became a citizen of France, and in 1825, or earlier, received the Cross of the Legion of Honor. He was financially ruined by results of the Revolution of 1830, and came to the United States in 1832, to travel in unsettled parts of the South and West. Here his talent for geographic work was soon recognized and brought to the knowledge of the U. S. War Department and Bureau of Engineers. Under their aid and direction, he made extensive exploring trips in the Northwest, including a canoe journey in 1836 from Fort Snelling up the Mississippi, and by portages beyond Leech lake, to Itasca lake, thence returning down the whole course of the Mississippi to the fort, and a trip in 1838 up the Minnesota river and past Lake Shetek to the red pipestone quarry. He died in the city of Washington September 11, 1843. His name is commemorated by Nicollet county, established by an act of the territorial legislature, March 5, 1853; and also by an island of the Mississippi in the city of Minneapolis, and by its finest business avenue.

In the United States government reports and maps of his work, his name appears varyingly as I. N. or J. N. Nicollet; and it is given as Jean N. by Gen. Sibley, Dr. Neill, Prof. N. H. Winchell, and other writers of Minnesota history. Researches by Horace V. Winchell, however, in 1893, published in the American Geologist (Vol. XIII, pp. 126-128, for Feb., 1894), show that his name was Joseph Nicolas Nicollet. A biographic sketch of him, with a portrait, is given by Prof. Winchell in the American Geologist (Vol. VIII, pp. 343-352, Dec., 1891); and additional details are given by H. V. Winchell in the article before cited.

The error of this name, hitherto generally mistaken, may have come from its being confounded with that of the much earlier French explorer, Jean Nicolet (also spelled Nicollet), who came to Canada in 1618, and who was a most energetic and honored agent of the proprietors of Canada for the promotion of the fur trade. In 1634 this Nicolet visited the Sault Ste. Marie, and thence came to Green Bay in eastern Wisconsin, being the first white man known to have visited any part of that state. He died on the last day of October, 1642, being drowned by shipwreck on the St. Lawrence river near Quebec.

In 1838, the second year after Catlin's journey to the pipestone quarry, it was visited, as before noted, by Nicollet, who described it thus:

> The Indians of all the surrounding nations make a regular annual pilgrimage to it, unless prevented by their wars or dissensions. The quarry is on the lands of the Sissiton tribe of Sioux.
>
> The idea of the young Indians, who are very fond of the marvellous, is, that it has been opened by the Great Spirit; and that whenever it is visited by them, they are saluted by lightning and thunder. We may cite, as a coincidence, our own experience in confirmation of this tradition. Short of half a mile from the valley, we were met by a severe thunderstorm, during which the wind blew with so much force as to threaten the overturning of Mr. Renville's wagon; and we were obliged to stop for a few minutes during the short descent into the valley.
>
> If this mode of reception was at first to be interpreted as an indication of anger on the part of the Great Spirit for our intrusion, we may add that he was soon reconciled to our presence; for the sun soon

NICOLLET'S UPPER MISSISSIPPI - 1842.

after made its appearance, drying both the valley and our baggage. The rest of the day was spent in pitching our tent on the supposed consecrated ground, and in admiring the beautiful effects of lights and shadows produced by the western sun as it illumined the several parts of the bluff, composed of red rocks of different shades, extending a league in length, and presenting the appearance of the ruins of some ancient city built of marble and porphyry. The night was calm and temperate, of which we took advantage to make astronomical observations.

* * * * * *

The principal rock that strikes the attention of the observer in this remarkable inland bluff, is an indurated (metamorphic) sand-rock or quartzite, the red color of which diminishes in intensity from the base to the summit. It is distinctly stratified, the upper beds being very much weather-worn and disintegrated into large and small cubic fragments. * * *

This red pipestone, not more interesting to the Indian than it is to the man of science, by its unique character, deserves a particular description. In the quarry of it which I had opened, the thickness of the bed is one foot and a half, the upper portion of which separates in thin slabs, whilst the lower ones are more compact. * * *

Another feature of the Red Pipestone valley is the occurrence of granitic boulders of larger size than any I had previously met. One of them measured about 60 feet in circumference, and was from 10 to 12 feet thick. They are strewed over the valley, in which it is remarkable that there are no pebbles.

The name of Nicollet, and the initials of the five other members of his exploring party, with the date, July, 1838, were cut in the quartzite at the top of the ledge near the Leaping Rock. The initials C. F. were for John Charles Fremont, then a young man, Nicollet's principal aid, who afterward was known as "the Path Finder," for his explorations of the Rocky mountains, and who in 1856 was the presidential candidate of the newly organized Republican party. Lake Benton received this name on Nicollet's map, for Senator Thomas H. Benton, whose daughter Jessie was married to Fremont in 1841; and a lake in North Dakota was named Lake Jessie in honor of her on this map.

GEOLOGICAL SURVEYS.

When this region had been thus mapped in a general way, the national government soon took steps to ascertain its geologic formations and mineral resources. Under instructions from the United States Treasury Department, and as a part of the work of the General Land Office, a geological survey of Wisconsin, Iowa, and Minnesota, was made during the years 1847 to 1850 by David Dale Owen, with assistance of Joseph G. Norwood, Benjamin F. Shumard, Charles Whittlesey, and others.

Biographic sketches and portraits of these four authors, whose writings contributed much to knowledge of the geology of this state, have been given in Volumes IV (1889) and XVI (1895) of the American Geologist, which was published monthly in Minneapolis, under the editorship of Professors Alexander and N. H. Winchell and others, from 1888 to 1905.

The report of the survey by Owen and his assistants was published in Philadelphia in 1852, as a quarto volume of 638 pages, with many figures in the text, and many plates of fossils, topographic and geologic maps, sections, etc. Prof. N. H. Winchell says of this work: "It has proved to be the worthy sire of a numerous progeny, the initiation and exemplar of a series of scientific publications by the U. S. government, partly under the War Department and partly by the Department of the Interior, which have caused American science to illumine the whole world."

During the early years of statehood of Minnesota, from 1860 to 1871, geologic examinations of parts of the state were made and published, under authority of the legislature, by Charles L. Anderson, Thomas Clark, Dr. Aug. H. Hanchett, Henry H. Eames, Nathan C. D. Taylor, Charles Whittlesey, and Prof. Alexander Winchell.

In 1872 the Geological and Natural History Survey of Minnesota was established by an act of the state legislature. Prof. N. H. Winchell was appointed as the state geologist, and served in this office thirty years, to the termination of the geological

part of this survey. Its large series of publications, and a summary of its results, are noted in Chapter II of this volume.

The first chapter (110 pages, with several maps) of the first volume, issued in 1884, of the quarto Final Reports of this survey, is entitled "Historical Sketch of Explorations and Surveys in Minnesota." It should be consulted by readers desiring a more full history of the early and later explorations and maps of this state, especially in their relations to geology.

Again in the second volume of the Final Reports, issued in 1888, Professor Winchell gives, in its pages 313-341, with fifteen views and maps, as a part of the chapter on Hennepin county, a very interesting historical review of all known descriptions and maps of the Falls of St. Anthony, from Hennepin to the most recent surveys.

Other important contributions to the geology of this state have been made by the United States Geological Survey, organized in 1879, most notably relating to its Archean rocks, iron ore ranges, glacial drift deposits, and the Glacial Lake Agassiz in the Red river valley. Several sheets of the national topographic map, covering small parts of Minnesota, have been surveyed and published; and as this great survey is continued, it will ultimately comprise a detailed topographic map of all our area. Later all the sheets constituting the map will be colored to show the geology, both of the bed rocks and of the glacial and modified drift.

THE MISSISSIPPI RIVER COMMISSION.

A most elaborate map of the Mississippi from its mouth to the city of Minneapolis, at the head of navigation as now extended by the recently constructed dams and locks between the mouth of Minnehaha creek and that city, has been published by the Mississippi River Commission, which was created by Congress in 1879. Eighty-eight double folio sheets cover the distance from the mouth of the Ohio river to the Gulf of Mexico, and eighty-nine sheets extend from the Ohio to Minneapolis. Soundings of the river are shown by this great map along all this course.

For the part of the Mississippi farther northward in this state the reports by Gen. G. K. Warren, Major Charles J. Allen, and others of the United States Engineer Corps, relating to the system of reservoirs constructed on its headwaters, comprise most valuable descriptions of that region.

Lastly, the most complete history, description, and cartography of Lake Itasca, and of the Itasca State Park there established by the legislature of Minnesota in 1891, are given by the late Hon. J. V. Brower in Volumes VII and XI of the Minnesota Historical Society Collections, respectively published in 1893 and 1904, each profusely illustrated by maps, views from photographs, and portraits. Volume XI contains a photographic reproduction of a large folio map of the Lake Itasca basin within the State Park, made by the Mississippi River Commission in the year 1900. This beautifully wooded park at the head of the Mississippi and the Interstate Park at the Dalles of the St. Croix, adjoining the village of Taylor's Falls, with its wonderful "giants' kettles," should be visited by every Minnesotan who loves the beauty of nature, or who is interested in the history and geology of our state.

COMPLETION OF EXPLORATIONS IN THREE CENTURIES.

What the Indians owned, we white people now own. The forests and prairies, streams and lakes, which the red man knew and loved, have been all searched out and appropriated by the white man as his home.

Indian lore passed from one generation to another by tradition. Our progress of discoveries and explorations, all that we have learned of the wealth of mine and quarry and soil, every curve of the great river, each shining lake of our ten thousand, are recorded in books and maps.

Each band or little group of the Indians knew well the trails, canoe routes, portages, favorite hunting grounds and fishing places, of their own district; but none knew, nor had they means of soon learning, all the geographic features of our en-

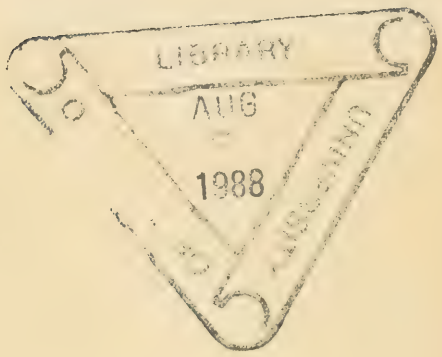
tire area. What the white man found he wrote down or mapped; and thus gradually from the times of Groseilliers and Radisson, and of Du Luth and Hennepin, through all the series of explorers that followed them, knowledge of the country has increased. It has been completed by the United States land surveys and plats, dividing all the state into townships and sections, and showing locations of all lakes and watercourses crossed by section lines.

The part of Minnesota first surveyed thus by the United States government is between the St. Croix and Mississippi rivers, from Point Douglas north to include the present Washington, Ramsey, and Anoka counties, with the southern part of Chisago county. The surveys of the range and township lines of this tract were begun in 1847 by James M. Marsh and Henry A. Wiltsie. On the west side of the Mississippi the earliest land surveys in Minnesota were in its southeast part, from the river west to the third guide meridian, which passes from south to north by Belle Plaine, to intersect the Mississippi near Monticello. The parallels and meridians forming the framework of these surveys were run by the late Hon. Thomas Simpson, of Winona, in the years 1853 to 1855. During sixty years, since 1847, the government sectional surveys of this state have been in progress, until last year they were finished, some of the northern parts being the last surveyed and platted. It is therefore now possible to draft a very accurate map of all the state.

By these exact surveys, supplementing the work of the many previous discoverers, geographic exploration of this area is completed. Its scenery, climate, animal and plant life, the rock formations, the great rivers and lakes, have been well described in books, magazine articles, and publications of learned societies, by many explorers, travelers, and scientists. Hundreds of these sources of information about this state are gathered in the libraries of the Minnesota Historical Society, of the University of Minnesota, and of our other universities and colleges, as also in the public libraries of our large cities.

If the present volume, recounting successive advances of exploration and description since 1655, shall cause all its readers

to feel more grateful to the hardy pioneer men and women who led the way to the present greatness of our commonwealth, and if it shall cause some of these readers to search further into this history by using the resources of our great libraries, its purpose and desired reward will be attained.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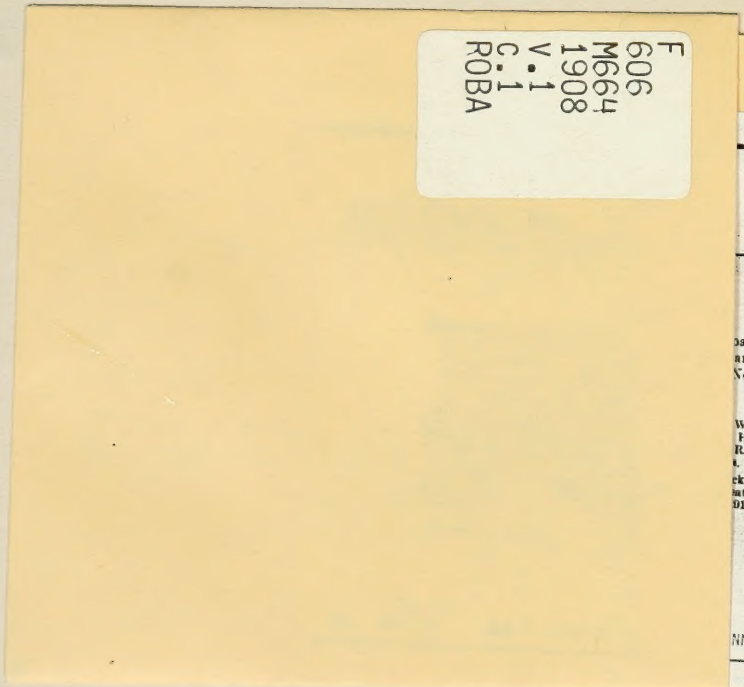

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